# SCHOOL DENTISTS' SOCIETY.

OBJECTS AND AIMS.

SECOND EDITION.

CATALOGUED



Med K49315



acad. London.

## Che School Dentists' Society.

Affiliated to the Child-Study Society,

AND

The National League for Physical Education and

Improvement.

#### ITS OBJECTS AND AIMS

(SECOND EDITION).

1913.

PUBLISHED FOR
THE SCHOOL DENTISTS' SOCIETY BY
W. MICHAEL & SON,
STANDARD PRINTING WORKS,
WATFORD, ENGLAND.

Also to be obtained at the leading Dental Depots.



70307 130

W. Michael & Son, standard printing works, watford.

WELLOCUTE						
eri.						
140.						

#### PREFATORY NOTE.

The School Dentists' Society, in publishing this second edition of "Objects and Aims," desires to express its indebtedness to Mr. Rupert H. Cumine (Vice-President) whose generosity has again enabled the Society to produce this booklet without entrenching on its funds.

All communications to the School Dentists' Society should be addressed to The Secretary, Street Lodge, Watford, England.

## CONTENTS.

					PAGES.		
List of Officers and					3		
List of Past Officers	and N	Members	of Cou	ncil	4		
List of Members, Date	e of Join	ing, & Ap	pointme	ents	5-16		
Rules					17-19		
School Dentists' Soc	iety		• • •		20-24		
List of Papers	• • •		• • •	•••	25-28		
Dental Requirements	s for Na	aval Rec	ruits		28-29		
Dental Requirements for Army Recruits							
Poor-Law Dental Ap	pointm	ents			29-34		
Metropolitan Asylum	s Board	Appoint	ments		35		
Board of Education, Appointments made with							
the sanction of	the	•••	• • •		36-39		
Admiralty					39		
War Office		• • •	• • •		39		
Home Office, Appointments made in Reformatory							
& Industrial Sch					40-59		
Suitable Equipment					60-62		
Local Government				ard			
to the Appointr				• • •	6364		
Remuneration of Sc	hool De	ental Off	icers	• • •	65		
Present Condition (19	12) of S	chool De	ntistry ir	ı:—			
England and Wa	les				66-69		
Scotland					69-72		
Ireland	• • •		• •	** 1	72-74		
Australia				• • •	74-77		
Canada					78		
New Zealand			• • •		79–81		
America—United	States	• • •		• • •	81-83		
Austro-Hungary	•••	•••	•••	• • •	83-85		
Belgium			•••	• • •	85-87		
Denmark	•••	• • •			87-89		
France			• • •		89–91		
Germany					91-94		
Italy	•••				94-95		
Russia					95-96		
Spain			• • •	• • •	97		
Sweden					98-99		
Oral Sepsis				I	00-101		
The Prevention of D	I	02-107					
The National Insura					107		
S.D.S. Dental Hygiene Charts108-11							
Lantern Slides of S.D.S. Dental Hygiene Charts 113							
Bibliography			• • •		114		
Index					115		

## LIST OF OFFICERS & COUNCIL, 1912-1913.

#### President:

R. DENISON PEDLEY.

#### Vice-Presidents:

SIDNEY SPOKES.

A. E. BAKER.

NORMAN G. BENNETT.

RUPERT H. CUMINE.

#### Council:

F. Breese.
Edward Keen.
E. C. Hale-Jessop.
Percival T. Leigh.

#### Editor of Transactions:

A. E. BAKER, 44 Brook Street, London, W.

#### Hon. Treasurer:

VERNON KNOWLES,

Kendrick View, London Road,

Reading.

#### Hon. Secretary:

WILLIAM FISK,

Street Lodge, Watford, Herts.

Telephone: 27 Watford.

# LIST OF PAST OFFICERS AND MEMBERS OF COUNCIL.

#### Past President:

SIDNEY SPOKES.

#### Past Vice-Presidents:

W. E. HARDING.

W. MacPherson Fisher.

R. DENISON PEDLEY.

THE LATE FRANK HARRISON.

#### Past Members of the Council:

W. MacPherson Fisher.

A. E. BAKER.

W. T. ELLIOTT.

R. E. NICHOLLS.

H. R. F. BROOKS.

A. E. DONAGAN.

NORMAN G. BENNETT.

THE LATE FRANK HARRISON.

R. DENISON PEDLEY.

H. T. Dreschfeld.

RUPERT H. CUMINE.

G. H. LODGE.

C. E. WALLIS.

JOHN CORDELL OLIVER.

W. W. GABELL.

R. R. WARD.

# LIST OF MEMBERS, DATE OF JOINING, AND APPOINTMENTS.

- \* Deceased Members are indicated by an asterisk.
- 1912. ADKINS, A. J., M.D.LOND., M.R.C.S., L.R.C.P., D.P.H., L.D.S.I., 37 Beckenham Road, Beckenham. Beckenham Education Committee. White Oak School of the Metropolitan Asylums Board.
- 1913. ANDREW, PERCY NATHANIEL, L.D.S.ENG., 7
  Gloucester Place, Brighton. Brighton Education Committee.
- 1910. BAILEY, J. J., L.D.S.EDIN., Crooksbury, Beaconsfield Road, St. Albans. Late King Edward VI. School, Witley, Surrey.
- 1898. BAKER, A. E., L.R.C.P., M.R.C.S., L.D.S.ENG., 44 Brook Street, Grosvenor Square, London, W. Late Marlborough College.
- 1911. BALLS, LEONARD C., L.D.S.ENG., 74 Wimpole Street, London, W. Children's Hospital, Paddington Green. Poplar Hospital (L.C.C. School Clinic).
- 1909. BALY, C. PEYTON, L.R.C.P., M.R.C.S., L.D.S.ENG.,
  150 Harley Street, London, W. Royal
  Academy of Music.
- 1913. BARTLE, PERCY, L.D.S.EDIN., 123 Hawley Street, Sheffield. Education Committee, Sheffield.
- 1904. BATES, G. L., L.R.C.P., M.R.C.S., L.D.S.ENG., 60
  Harley Street, London, W. Late Royal
  Hospital School, Greenwich. Late Royal
  Military School, Chelsea.
- 1899. BENNETT, NORMAN G., M.A., M.B.CANTAB., L.R.C.P., M.R.C.S., L.D.S.ENG., 50 Brook Street, London, W. Late St. Marylebone Schools, Southall.

- 1905. BENNETTE, H. W. P., L.D.S.ENG., 42 Hamilton Square, Birkenhead. All Saints' Home for Children, Birkenhead.
- 1912. BOOTH, WILLIAM RICHARD WARD, L.D.S.GLAS.,
  132 Northfield Road, Kings Norton, Birmingham. Messrs. Cadbury Bros.' Staff,
  Bournville, Birmingham.
- 1907. BREESE, FREDERICK, L.D.S.ENG., Somerset Lodge, 328 Brixton Road, London, S.W. Jew's Hospital and Orphan Asylum, West Norwood. Norwood Schools, Lambeth Guardians. Brixton Hill Industrial Schools, L.C.C. St. George's Dispensary, S.E. (L.C.C. Centre).
- 1903. BRITTEN, ARTHUR, L.D.S.ENG., 11 Bennets Hill, Birmingham. Late Princess Alice Orphanage, New Oscott, Birmingham.
- 1900. BROOKS, H. R. F., J.P., L.D.S.EDIN., GLAS. AND I.,
  Tintern House, High Street, Banbury.
  Bloxham School. Buckingham Centre,
  Bucks. C.C. Education Committee.
- 1911. BROUGHTON-HEAD, L. C., M.B., CH.B.GLAS., L.D.S.ENG., Bath Street, Glasgow. The Dispensary. Royal Hospital for Sick Children, Glasgow.
- 1909. CAMPBELL, WILLIAM GRAHAM, M.B., C.M., L.D.S.EDIN., 27 South Tay Street, Dundee. Trinity College, Glenalmond.
- 1899. CARTER, CHARLES EDWARD, L.D.S.ENG., 15
  Ambleside Avenue, Streatham, S.W. Holborn Schools, Mitcham. George Blount
  Home for Boys, Streatham. Norwood School
  Treatment Centre. Inspecting Dentist in the
  Public Health Department of L.C.C.

#### List of Members, &c .- Continued.

- 1912. CATT, Ernest, L.D.S.I., D.D.S.MICH., 4 Pavilion Terrace, Scarborough. Scarborough Board of Guardians.
- 1899. CAUSH, Douglas, L.D.S.I., 63 Grand Parade, Brighton. Late Uckfield Grammar School.
- 1909. COMMON, ROBERT KEITH, L.D.S.EDIN., 74

  Murray Place, Stirling. Queen Victoria
  Schools, Dunblane.
- 1912. COTTAM, THOMAS MATTHEW, L.D.S.I., Caxton House, Oswestry. Oswestry Incorporation Boarding-Out Committee. Oswestry Dispensary. Oswestry and Ellesmere Cottage Hospital.
- 1911. COTTERELL, Graham, L.D.S.ENG., 26 Cotton Lane, Moseley, Birmingham. Coventry Corporation Education Committee.
- 1899. CUMINE, RUPERT H., L.D.S.I., 4 Finsbury Circus, London, E.C. St. Georges in the East Poor Law Schools.
- 1899. CUTTS, F. E., L.D.S.ENG., 36 King Street, Lancaster. Ripley Hospital Orphan Asylum, Lancaster. Victoria Home, Church of England Waifs and Strays, Bolton-le-Sands.
- 1913. DINNIS, ALFRED, M.R.C.S., L.R.C.P. L.D.S.ENG.,
  The Acacias, Brocket Road, Hoddesden,
  Herts. Haileybury College.
- 1900. DRESCHFELD, HENRY T., L.D.S.EDIN., 25 St. Ann Street, Manchester. Manchester and Salford Reformatories.
- 1913. DUGUID, JOHN, L.D.S.GLAS., Town Hall, Southport. Southport Education Authority.

#### List of Members, &c .- Continued.

- 1911. EDMONDSON, T. A., L.D.S.ENG., 49 John Street, Workington, Cumberland. Cockermouth Union Schools.
- 1898. ELLIOTT, W. T., L.D.S.I. AND EDIN., D.D.S. TORONTO, 65 Temple Row, Birmingham; and Stratford-on-Avon. Marston Green Homes, Birmingham. Industrial Home for Girls, Stratford-on-Avon.
- 1912. ERBY, WILFRED HAMILTON, L.D.S.F.P.S.GLAS., 87 Church Road, Hove, Sussex. Hove Education Committee Schools.
- Road, Watford. St. Margaret's School, Bushey. St. Pancras Poor Law Schools, Leavesden. Poor Law Children, Watford Union. London Orphan Asylum, Watford.
- r899. FLINTAN, Francis R., L.D.S.Eng., Holmewood, Burwood Park Road, Walton-on-Thames. School of Handicrafts, Chertsey, Surrey, and St. Nicholas Home for Children, Byfleet, Surrey.
- 1901. FRIEND, HERBERT PERCIVAL, L.D.S.EDIN., 40 Galgate, Barnard Castle, co. Durham. North Eastern County School, Barnard Castle.
- 1903. GABELL, WILFRID WILLIAM, L.D.S.ENG., Chiltern Villa, Station Road, New Barnet. Boys' Farm Home, Church Farm, E. Barnet. Voluntary Certified Industrial School under the Home Office.
- 1907. GLASSINGTON, CHARLES W., M.R.C.S., L.D.S. EDIN., 6 Pelham Crescent, S. Kensington, S.W. Duke of York's School.

#### List of Members, &c.—Continued.

- 1911. GRIFFIN, R. W. L.D.S.ENG., 100 High Street,
  Bromley, Kent. Bromley Education Committee. Late Atcham Union; Shustoke
  Industrial School; Birmingham Cripple
  Children's Union; and Old Hall Preparatory
  School, Wellington, Salop.
- 1911. GUANZIROLI, Louis F., L.B.S.ENG., 176, Worple Road, Wimbledon. L.C.C. Education Authority.
- 1910. GWATKIN, A. J., L.D.S.ENG., 24 Vernon Terrace, Brighton. Barclay Home and School for the Blind, Brighton.
- 1898. HALE-JESSOP, E. C., L.D.S.I., 13 Beaumont Street, Oxford. Oxford Poor Law Schools.
- 1899. HALL, T. S. Muspratt, L.D.S.I., Cromwell House, Clarence Road North, Weston-Super-Mare. Late St. Edward's Orphanage, West Malvern.
- 1898. HARDING, W. E., L.D.S.ENG., Acton House, Shrewsbury.
- 1899. \*HARRISON, F., M.R.C.S., L.D.S.EDIN., 289 Glossop Road, Sheffield. Late Totley Orphanage.
- 1904. HARRISON, WALTER, L.D.S.ENG., D.M.D.HARV., 6 Brunswick Place, Hove, Brighton. Royal Alexandra Hospital for Sick Children.
- 1906. HARRIS, GEORGE WILLIAM, L.D.S.GLAS., 56
  Shakespeare Street, Nottingham. Nottingham Training Institute.
- 1913. HEATH, R. H., L.D.S.ENG., D.D.S.PENN., 2
  Park Crescent, Portland Place, London, N.W.
  Marlborough College.
- 1901. HUDSON, ALFRED G., L.D.S.I., South Street, Leominster. Lucton Endowed School.

- 1913. JAMES, WILLIAM WARWICK. L.R.C.P., F.R.C.S., L.D.S.ENG., 2 Park Crescent, Portland Place, London, N.W. Marlborough College.
- 1907. JONES, HENRY CADWALADR, L.D.S.ENG., 41
  Craven Hill Gardens, Lancaster Gate, W.
  Brentford Union Schools.
- 1907. JONES, W. HENRY, L.D.S.ENG., 14 Gelliwastad Road, Pontypridd, South Wales. The South Wales and Monmouth Truant School.
- 1899. KEEN, EDWARD, M.R.C.S., L.D.S.ENG., 56 Sydney Street, South Kensington, S.W. Kensington and Chelsea Poor Law School. "Exmouth" Training Ship. L.C.C. Industrial School, Hackney Downs. L.C.C. Industrial School, Watford. L.C.C. Industrial School, Isleworth.
- view, London Road, Reading. Wellington College, Berks. Blue Coat and Green Girls' Schools, Reading. Reading Education Committee Dental Officer.
- 1901. LEIGH, PERCIVAL T., L.D.S.ENG. AND GLAS., 6
  Portland Crescent, Leeds. Mt. St. Mary's
  Orphanage Schools. Leeds Reformatory
  School.
- 1899. LONNON, FREDERICK, L.R.C.P., M.R.C.S., L.D.S. ENG., 77 Denmark Hill, London, S.E. Gordon Bovs' Home, Woking.
- 1902. LOVE, Hugh, L.D.S.ENG., 170 Seven Sisters Road, London, N. Islington Board of Guardians.
- 1910. MACFARLANE, J., L.D.S.ENG., 30 Wellesley Road, Croydon. Shirley Schools. Bermondsey Board of Guardians.
- 1913. MACDONALD, ARTHUR K., M.A.CANTAB., M.DENT.SC.DUB., L.D.S.I., 29 Kildare Street, Dublin. Royal Hibernian Military School.

#### List of Members, &c.—Continued.

- Road, Douglas, Isle of Man. Isle of Man Home for Poor Children.
- 1905. MAURICE, Albert, L.D.S.EDIN., Rose Hill House, Dorking; and 18, Portland Place, W. Royal Asylum of St. Anne's Society, Redhill. Late Belgrave Hospital for Children.
- 1906. MAURICE, HAROLD, L.D.S.ENG., 47 Church Road, Hove, Brighton. Holy Cross Home, Hayward's Heath.
- 1912. MORREY, JOSEPH, L.D.S.VIC.UNIV.MANCH., 26
  Nicholas Street, Chester. Chester Education
  Authority Elementary Schools.
- 1913. MOXLEY, CHARLES FREDERICK, L.D.S.EDIN.,
  School Clinic, Fashoda Road, Selly Oak,
  Birmingham. Birmingham School Clinic.
  Late H.M. Training Establishment (Boys),
  Shotley Barracks.
- 1910. MUSGROVE, E. H., L.D.S.ENG., 55 High Street, Merthyr Tydvil. Bedwellty Board of Guardians, Tredegar, Mon.
- 1898. NICHOLLS, R.E., L.D.S.ENG., I Harley Street, London, W. Late Felstead School.
- 1912. NORTH, BENJAMIN, L.D.S.ENG., 80 St. Donatt's Road, New Cross, S.E. Deptford School Clinic, L.C.C.
- 1912. ORAM, C. H., L.D.S.ENG., 6 College Terrace, Southampton. St. Joseph's Orphanage, Romsey. Romsey Union.
- 1898. PARE, J. W., M.D., C.M.EDIN., L.D.S.ENG., 64
  Brook Street, London, W. Late North
  Eastern Children's Hospital.

#### List of Members, &c.—Continued.

- 1903. PEARCE, FRANK J., L.D.S.ENG., D.D.S.PENN., 37
  Queen Anne Street, Cavendish Square,
  London, W. Late Belgrave Hospital for
  Children.
- M.R.C.S., L.D.S.ENG., 8 Southgate Street, Winchester. Late Diocesan Home for Training Friendless Girls, Winchester. Late Poor Law Children, Alresford Union. Late Tonbridge School.
- 1898. PEDLEY, R. DENISON, M.R.C.S., L.D.S.ENG., F.R.C.S.EDIN., 17 Railway Approach, London Bridge, S.E. Consulting Dental Surgeon, Evelina Hospital for Children, Southwark. Consulting Dental Surgeon, Dr. Barnardo's Homes.
- 1898. PRICE, REES, L.D.S.ENG., 163 Bath Street, Glasgow. Royal Hospital for Sick Children, Glasgow.
- 1906. POLLITT, GERALD PATON, L.D.S.ENG., D.D.S. PENN., 50 Brook Street, London, W. Late Paddington Green Children's Hospital.
- 1898. REEVES, S. G., L.D.S.I., 12 Clare Street, Dublin. Late Morehampton House School.
- 1903. RENSHAW, ISAAC, L.D.S.I., 87 Drake Street, Rochdale. Member of the Rochdale Education Committee.
- 1912. RITCHIE, FREDERICK CHARLES, L.D S.ENG., 10 South Street, Romford. Romford Education Authority Elementary Schools.

  Brentwood Education Authority Elementary Schools.

- 1905. RODWAY, BARRON J., L.D.S.ENG., 6 Hulme Place, The Crescent, Salford. Hon. Salford Royal Hospital. Children, Salford Union. Salford Day Industrial School. Manchester Ladies' Jubilee School.
- 1899. ROOKE, J. FAULKLAND, M.R.C.S., L.R.C.P.,
  L.D.S.ENG., The Briars, Newbury, Berks.
  West London District Schools. Poplar
  Schools, Shenfield, Essex.
- 1902. ROSE, SAMUEL F., L.R.C.P., M.R.C.S., L.D.S.ENG., 25 Weymouth Street, Cavendish Square, London, W. Queen's Hospital for Children. Central London District Schools, Hanwell.
- 1910. ROUND, HAROLD, L.D.S.ENG., 141 Great Charles
  Street, Birmingham. Princess Alice Branch
  National Children's Home and Orphanage.
- 1908. ROUTLEDGE, CHARLES LINNŒUS, L.D.S.EDIN.,
  62 Jesmond Road, Newcastle-on-Tyne.
  Cottage Homes for Children, Gateshead
  Board of Guardians. Royal Victoria School
  for the Blind, Newcastle-on-Tyne.
- 1911. SHENNAN, LAWSON STORROW, D.D.S.PENN., L.D.S.EDIN., 28 Alva Street, Edinburgh. Carnegie Dunfermline Trust School Clinic.
- 1902. SHORROCK, J. ISHERWOOD, L.D.S.ENG., 34
  Woodbine Road, Blackburn. Late Carmarthen Education Committee. Late Gwestfa
  Homes, Manordilo. Blackburn Board of
  Guardians.
- 1912. SMYTH, LEO J., L.D.S.I., 63 Harcourt Street, Dublin. Terenure District Schools, co. Dublin, under Lady Aberdeen's W.N.H.A.
- 1898. SPOKES, SIDNEY, J.P., M.R.C.S., L.D.S.ENG., 4
  Portland Place, London, W. Mill Hill School.

#### List of Members, &c .- Continued.

- 1909. SPRAWSON, EVELYN C., M.R.C.S., L.R.C.P., L.D.S. ENG., 26 New Cavendish Street, London, W. Dr. Barnardo's Homes, Stepney and Barkingside. Commercial Travellers' Schools, Pinner.
- 1912. STEWART, NORMAN Y., L.D.S.I., D.D.S.PENN., 26 Westland Row, Dublin. Meath Industrial School for Girls, Bray, Co. Wicklow. Masonic Female Orphan School, Dublin.
- 1899. STOREY, J. CHARLES, L.D.S.I., Dunallan House, 13 Albion Street, Hull. Port of Hull Society's Sailors' Orphan Home.
- 1901. STRAND, A. C., M.R.C.S., L.R.C.P., L.D.S.ENG., 30 Wimpole Street, London, W. Orphan Working School, Maitland Park, Hampstead, N.W.
- 1903. SUTCLIFFE, C. F., L.D.S.I., 4 Ogle Terrace, South Shields. Tyne Training Ship, "Wellesley."
- 1910. TAYLOR, LIONEL, L.D.S.ENG., 12 St. Catherine's Road, Littlehampton, Sussex. Late East Preston Poor Law Children.
- TAYLOR, HEDLEY H., L.D.S.ENG., 22 Museum Street, Warrington. Warrington School Clinic. Warrington Blue Coat School. Warrington Union Cottage Homes.
- 1912. TAYLOR, WILLIAM ROBB, L.D.S.GLAS., 290
  Duke Street, Glasgow. Glasgow Juvenile
  Delinquency Board (Mossbank School).
- TEBBITT, E. R., L.D.S.ENG., 4 Frant Road, Tunbridge Wells. Dr. Barnardo's Home for Cripple Children, Tunbridge Wells. The Church of England Home for Waifs and Strays, Tunbridge Wells.

- List of Members, &c.—Continued.
- 1900. \*THOMSON, Joseph S., L.D.S.EDIN., 19 Lower Fitzwilliam Street, Dublin. Late Richmond Orphanage, Greystones.
- 1906. THOMSON, GEORGE, L.D.S.ENG., 38 Harley Street, London, W. Lampson Home for Waifs and Strays, Dulwich.
- 1900. TRACY, Hugh Loveridge, L.D.S.Glas., 9 Lower Brook Street Ipswich. St. John's Home, Ipswich.
- 1912. VERNON, T., L.D.S.ENG., Blanthorne Lodge, 100 Herne Hill, S.E. Fulham Dental Clinic.
- 1912. WALLIS, C. Doswell, L.D.S.ENG., 27 South Street, Worthing. Worthing Corporation Council Schools.
- 1903. WALLIS, C. EDWARD, L.R.C.P., M.R.C.S., L.D.S.
  ENG., 38 Queen Anne Street, London, W.
  Assistant Medical Officer L.C.C. Public
  Health Department. Darenth Industrial
  Colony. St. Marylebone Poor Law Schools,
  Southall. Late Victoria Hospital for Children,
  Chelsea. Late Feltham Industrial School.
- 1905. WARD, RICHARD R., L.D.S.ENG., Milverton.
  Brighton Road, Sutton, Surrey. Royal
  Female Orphan Asylum, Beddington, Surrey,
- 1912. WESTLAKE, B. B., L.R.C.S., L.R.C.P., L.D.S. EDIN., Sadowa House, Clarence Road, Windsor. Imperial Service College, Windsor. Windsor Education Authority. St. Augustine's Home for Boys, Clewer, Windsor.
- 1908. WILMORE, WALTER, L.D.S.ENG., Romsdal, Forest Gate, Essex. St. Nicholas' School, Manor Park, E.
- 1910. WOOD, BRYAN J., L.D.S.ENG., 7 London Road, Kettering. Kettering Education Authority.

#### HONORARY MEMBERS.

Appointed under Rule 3.

PROFESSOR DR. JESSEN of Strasburg.

Dr. G. K. Thomson of Halifax, Nova Scotia.

HERR ENGEL of Fuerth, Bavaria.

MR. BROOKE NICHOLLS of Victoria, Australia.

DR. POTTER of Boston, U.S.A.

Mr. W. MacPherson Fisher of Dundee.

Monsieur Francis Jean of Paris.

#### CORRESPONDING MEMBERS.

Appointed under Rule 4.

M. Maurice Bon, Brussels.

DR. COEN-CAGLI, Milan.

Mr. E. W. HAENKE, Department of Public Instruction, Brisbane, Queensland.

HERR H. KIENTOPF, Berlin.

DR. LANDETE, Madrid.

M. ALBIN LENHARDSTON, Stockholm.

Mr. Claude H. Moses, Hon. Sec. Auckland Branch of N.Z.D.A.

Dr. Edgar Neumann, Vienna.

M. Fritz Orth, Copenhagen.

Professor H. P. Pickerill, University of Otago, New Zealand.

Mr. Roy Sims, Dentist to the Wards and Neglected Children of the State of South Australia.

Mr. L. Walther, Moscow.

DR. HERBERT L. WHEELER, New York.

## RULES, 1898 (Amended 1904 & 1912).

#### OBJECTS.

1. The objects of the Society are (1) mutual assistance in promoting School Dentistry, and (2) the holding of meetings for the consideration of all subjects connected with the special work of School Dentists.

#### CONSTITUTION.

2. All present or retired Dentists appointed to any Public Institution for Children, under the control of the Council or other governing body (i.e., non-proprietory) are eligible for election as members of the Society, subject to Rule 17.

#### HONORARY MEMBERS.

3. Distinguished persons known to interest themselves in the objects of the Society are eligible for election as Honorary Members.

#### CORRESPONDING MEMBERS.

4. The Council shall have power to elect as Corresponding Members persons resident abroad who are associated with School Dentistry.

#### THE COUNCIL.

- 5. The general Management of the Society shall be vested in a Council, consisting of the Officers and four Members of the Society.
- 6. The Officers shall consist of a President, one or more Vice-Presidents, Editor of Transactions, Treasurer, and Secretary.
- 7. The Election of the Council shall take place at each Annual General Meeting (except in the case of a vacancy arising from any cause, when the Council shall fill up such vacancy), and shall be by ballot, out of names duly proposed and seconded. All the Officers shall be eligible for re-election.
- 8. The four Members of the Council shall retire in rotation, one at each Annual General Meeting, and shall not be eligible for re-election for one year.

- 9. The Secretary shall keep the records of the Society, have the management of the correspondence, and shall arrange with the President concerning the papers to be read at the meetings.
- 10. The President, Secretary, or two Members of the Council shall have the power of calling a Meeting of the Council, or a Special General Meeting of the Society.

#### MEETINGS.

- II. The Annual General Meeting shall be held in London. There may be one or two other General Meetings in the course of the year, the times and places to be arranged by the Council.
- 12. The Secretary shall call a Special General Meeting on receiving a requisition to that effect signed by six Members of the Society.
- 13. Members shall receive at least 14 days' notice of each Meeting, and the circular convening it shall specify the papers to be read and the business to be transacted.
- 14. Each Member may introduce two visitors, who may take part in the discussions.
- 15. The President shall determine what subjects may be discussed at any Meeting other than those placed on the notice convening the Meeting.
- 16. The order of proceeding at General Meeting shall be as follows.—

Chair taken. Minutes of last Meeting.

Reports of Council. Correspondence.

Election of Members. Papers read.

Discussions on Special Subjects, to be determined by the President.

#### ELECTION OF MEMBERS.

17. A Candidate for Election as a Member shall be proposed and seconded by two Members, and shall forward to the Secretary a paper, signed by his proposer and seconder, setting forth his name and residence, and the appointments that he may hold, and certifying that he conducts his practice in such a way as would render him eligible for Membership of the British Dental Association.

18. The Election of Members shall take place at any Meeting of the Society, or of the Council, and shall be by ballot; no candidate shall be declared elected unless he shall have in his favour three-fourths of the total number of votes.

#### FINANCE.

- 19. The Annual Subscription shall be Five Shillings, payable in advance at the Annual General Meeting.
- 20. The Treasurer shall collect and account for the Subscriptions, and all moneys shall be banked in the name of the Society, and cheques signed by the Treasurer and Secretary.
- 21. If any Member's Subscriptions be more than a year in arrear his name shall be liable to be erased from the List of Members.
- 22. The Accounts shall be audited by two Members appointed by the Society for the purpose, and shall be presented at the Annual General Meeting.

#### NEW RULES.

- 23. Any Member wishing to propose an alteration in, or any addition to the Rules, must give notice thereof to the Secretary, in writing at least three weeks previous to a Meeting.
- 24. No alteration or addition to the Rules shall be valid unless two-thirds of those present at the Meeting vote in its favour, and it be confirmed by a similar majority at the next General Meeting.

#### REMOVAL OF MEMBERS.

- 25. Any Member desirous of withdrawing from the Society shall signify the same by letter to the Secretary.
- of the Council, for the removal of a Member from the Society, a statement of the circumstances shall be prepared by the Council and submitted to the Society; on the question of such removal being put to the ballot and four-fifths of the Members present voting for it (five at least being present) the Chairman shall declare such person removed from the Society.

#### THE

### SCHOOL DENTISTS' SOCIETY.

The question of School Dentistry may be said to have been first seriously considered in the United Kingdom in 1885. At the Annual Meeting of the British Dental Association held in Cambridge, Mr. W. MacPherson Fisher, of Dundee, drew attention to the existing dental condition of the juvenile population in this country by his excellent paper on "Compulsory Attention to the Teeth of School Children." In this paper he contended that the teeth of children should have the same care as other parts of the body. "That every child's mouth ought to be examined and treated on its entrance into school life . . . . and at least once a year, or oftener by a qualified dentist. For the working classes and those too poor to pay for dental service, dental dispensaries or other aid should be provided."

In 1886, Mr. Fisher read his second paper at the Annual Meeting of the British Dental Association held In this paper he further emphasized the in London. need of "Compulsory Attention to the Teeth of School Children," pointing out that this subject "belongs entirely to the public, and that upon the dental section of the medical profession rested the responsibility of teaching the public." He also stated that vast numbers of children were already under medical supervision and yet their teeth were neglected. The children were to be found in Reformatories and Industrial Schools, in Orphan Schools and Endowed Hospitals, also in the Poor Law or Workhouse Schools throughtout the country. would include with the children of the Army and the Navy the men themselves, all these requiring only an extension of medical supervision to save them from much The bulk of the school children disease and suffering. in the United Kingdom, however, differed from those above mentioned in that they were not under direct medical supervision. It would not only be wise but a great saving of health to the community if public money were expended "in upholding weakened and impaired physical structures in our rising youth."

These papers not only occasioned interesting discussions at the meetings of the British Dental Association, but were widely and sympathetically referred to both in the medical and lay press throughout the country.

In 1888, Mr. Fisher presented a report at the Dublin Meeting of the British Dental Association, and asked for a grant of £10 to provide case-books for members of the Association to corroborate his statements with regard to the condition of children's teeth. This sum was voted unanimously, and 100 books were provided, consisting of two pages of reports, and 112 pages with diagrams of the temporary and permanent teeth, each book being capable of recording fully the details of 1,000 cases.

These books were shown at the Ninth Annual Meeting of the Association which was held at Brighton in 1889; and Mr. Fisher proposed a method by which a collective investigation could be carried out through the medium of the branches of the Association throughout the United Kingdom.

On March 1st, 1890, a committee was appointed "to continue and to conduct the collective investigation as to the teeth of school children, and to finally report thereon to the Representative Board."

This committee issued seven Annual Reports from 1891 to 1897.

The reports form a permanent record of what has been accomplished by members of the British Dental Association throughout the United Kingdom. 12,318 children were carefully examined, and the condition of every tooth in each child's mouth was recorded. Much of the working out of the evidence and the placing into statistical form were due to Mr. George Cunningham, of Cambridge, whose valuable elaborations and tables were much appreciated.

The several reports have been not only conducive to the education of the British Public, but, indirectly, of enormous benefit to the children themselves.

As illustrating this latter statement the fact may be mentioned that from the Poor Law Schools of London

about 1,000 children go out every year; the boys are apprenticed to various trades or join the Army and Navy training bands; 500 girls go out into domestic service. Before the investigation took place and the reports were issued, very few of these boys and girls knew the use of a tooth brush. Since the investigation, qualified Dental Surgeons have been appointed and Dental Clinics established at many Schools by intelligent Guardians and sanctioned by the enlightened policy of the Local Government Board. Not only do the children understand the tooth brush drill, but they start their training for citizens with clean and healthy mouths. Previous to the appointment of those dental officers, a large percentage of boys wishing to enter the Army or Navy were refused on account of faulty condition of the teeth.

The next step was an important one, viz:

## THE FORMATION OF THE SCHOOL DENTISTS' SOCIETY.

Several Poor Law School Dental Appointments having been made, in some cases including the establishment of School Dental Clinics, it was soon thought desirable that opportunities should be afforded for the holders of such posts to meet and exchange views and, generally, to promote school dentistry.

Accordingly, The School Dentists' Society was founded at a meeting, called by circular, and held at the residence of Mr. Sidney Spokes, 4 Portland Place, London, W., on Saturday, July 23rd, 1898.

The following officers were elected:-

PRESIDENT - - MR. SIDNEY SPOKES.

VICE-PRESIDENT - MR. W. E. HARDING.

HON. TREASURER - MR. VERNON KNOWLES.

HON. SECRETARY - MR. WILLIAM FISK.

Council - - - Mr. R. E. Nicholls.

" W. MacPherson Fisher.

" W. T. ELLIOTT.

,, A. E. BAKER.

Since the formation of the Society, increased public interest has been aroused in School Hygiene owing to legislation making compulsory the medical and dental inspection of Elementary School Children. School Dental Clinics for the treatment of children have been established in many parts of England, and the urgent need for dental supervision is now recognised by many Public Health Authorities. The Society has steadily kept in view the desirability of educating public authorities having the care of children in the importance of inaugurating and maintaining the dental supervision from the aspect of Public Health.

Frequent meetings of the Society are held for the consideration of matters pertaining to School Dentistry. A list of the papers read and discussed is given on pages 25–28. Subsequently these papers are printed in the *Transactions of the School Dentists' Society.\** This serves several purposes: Members have a permanent record of the meetings; those unable to be present are kept in touch with the growth and changes in the sphere of School Dentistry; and information, which has already been recognised as of great value by Public Health Authorities and Public Officials, is available for all who are interested in the question of School Hygiene.

Since the publication of the first edition of "Objects and Aims," the Society has sustained the loss of a highly esteemed Vice-President, by the death of Mr. Frank Harrison, of Sheffield, whose efforts and interest in School Dentistry did much to forward the principles advocated by the Society.

In issuing the second edition of this booklet the Society desires to acknowledge its indebtedness for the assistance given in furnishing information by those who, although not members of the Society, have taken an interest in the provision of Dental supervision for the juvenile population.

During the fourteen years of its existence the Society has been carrying on its work steadily, and its influence and usefulness have been widely recognised.

<sup>\* 6</sup>d. each number, obtainable of the Hon. Secretary of the School Dentists' Society.

- It has advocated compulsory inspection and treatment of teeth for children attending the Poor Law and Elementary Schools.
- II. It has published diagrams for the use of Teachers.
- III. A booklet on the care of the teeth has also been issued.
- IV. Members have attended meetings to advocate the principles of the Society.
  One of the most important was a Meeting held in the Council Chamber at Sheffield, presided over by the Lord Mayor.
- v. The Society has consistently watched the appointments of School Dentists with the view of seeing that none but duly qualified practitioners were selected. Action was taken in the case of an appointment to a school of a person not on the Register, and made by the sanction of the Home Office.
- vi. The Society has published a list of Dental Surgeons holding School appointments.
- wii. It was able, by correspondence with the Local Government Board, to define the legal position of the Poor Law Dental Officer.
- vIII. Advice re school dentistry and dental appointments has been given by request to public bodies and dental surgeons in Great Britain and Ireland.
- IX. The Society has also petitioned the Board of Education and County Councils, and interviewed Members of Parliament, in the interests of School Dentistry.
- x. Delegates have been sent to various Congresses and Conferences, such as those held at Nuremberg, Berlin, Dresden, Stockholm, Paris, and London.
- xI. A Collection of Lantern Slides and Specimens for Popular Lectures is in course of preparation.

# LIST OF PAPERS READ BEFORE THE SOCIETY.

- r. "The Classification of the Ages of Children for the purpose of Statistical Observation," by W. T. Elliott, L.D.S.I. AND EDIN., January 13th, 1899.
- 2. "The Teeth of the Young," by SIDNEY SPOKES, M.R.C.S., L.D.S.ENG., May 20th, 1899.
- 3. "The Practice of Dentistry in Poor Law Schools," by W. J. Fisk, L.D.S.Edin., November 20th, 1899.
- 4. "The Necessity for a Simple Uniform Method of Recording Dental Operations in Poor Law and Other Schools," by Vernon Knowles, L.D.S.ENG., April 1st, 1900.
- 5. "Notes on Nine Years' Dental Attendance at a large Public School" (Marlborough College), by A. E. BAKER, L.R.C.P., M.R.C.S., L.D.S.ENG., December 3rd, 1900.
- 6. "The Hospital Treatment of Children's Teeth," by J. W. Pare, M.D., C.M.EDIN., L.D.S.ENG., December 2nd, 1901.
- 7. "The School Dental Register," by Vernon Knowles, L.D.S.ENG., November 17th, 1902.
- 8. "The Siegfried Spring," its value in the regulation of school children's teeth, by Frederick Lonnon, L.R.C.P., M.R.C.S., L.D.S.ENG., April 6th, 1903.
- 9. "Poor Law Remuneration as affecting Dental Work," by W. T. Elliott, L.D.S.I. AND EDIN., November 30th, 1903.
- ro. "The Treatment of Teeth in Children from a Local and a Constitutional Point of View," by R. Denison Pedley M.R.C.S., L.D.S.ENG., F.R.C.S. Edin., June 17th, 1904.
- II. "The Teaching of Dental Hygiene in Schools," by W. J. Fisk, L.D.S.EDIN., August 8th, 1904.

#### List of Papers .- Continued.

- 12. "Dental Instruction and the Educational Authorities of the London County Council," with Models and Diagrams, by C. E. Wallis, L.R.C.P., M.R.C.S., L.D.S.ENG., November 21st, 1904.
- 13. "Dental Surgery in an Industrial School," by W. W. GABELL, L.D.S.ENG., November 20th, 1905.
- 14. "Stomatitis in Children," by F. J. Pearce, L.D.s. Eng., D.D.s. Penn., March 19th, 1906.
- 15. "A Lecture suited for a Popular Audience," illustrated with original Diagrams by means of Lantern Slides, by Frank Harrison, M.R.C.S., L.D.S.EDIN., December 3rd, 1906.
- 16. "Traumatic Injury to the Incisors of Young Patients," by Frederick Lonnon, L.R.C.P., M.R.C.S., L.D.S.ENG., February 22nd, 1907.
- 17. "A Visit to the School Dental Surgeries of Strasburg, Mulhausen, and Darmstadt," illustrated by lantern slides, by C. E. Wallis, M.R.C.S., L.R.C.P., L.D.S. ENG., June 17th, 1907.
- 18. "The State and School Children's Teeth," by J. C. OLIVER, L.D.S.ENG., December 9th, 1907.
- 19. "Fifteen Years' Work among Poor Law Children, and some deductions therefrom," by EDWARD KEEN, M.R.C.S., L.D.S.ENG., December 9th, 1907.
- 20. "The Education (Administrative Provisions) Act and Dentistry," by W. T. ELLIOTT, L.D.S.I. AND EDIN., December 9th, 1907.
- 21. "An Experiment in a School Dental Clinic, and its Lessons," by Bryan J. Wood, L.D.S.ENG. June 22nd, 1908.
- 22. "Dental Surgery in relation to Medical Inspection in Primary Schools," by Vernon Knowles, L.D.s. ENG., March 15th, 1909.
- 23. "Dental Surgery in Factories," by Chas. Edward Carter, l.d.s.eng., September 27th, 1909

#### List of Papers.—Continued.

- 24. "The Extraction of Teeth in its relation to their Mesiodistal Approximation," by George Thomson, L.D.S.ENG., December 13th, 1909.
- 25. "A Practical Review of Dentistry for Elementary School Children," by A. W. GANT, L.D.S.ENG., April 29th, 1910.
- 26. "School Clinics," by C. Edward Wallis, L.R.C.P., M.R.C.S., L.D.S.ENG., September 26th, 1910.
- 27. "Methods of Recording Dental Operations in Residential and Elementary Schools," by EVELYN SPRAWSON, M.R.C.S., L.R.C.P., L.D.S.ENG., November 14th, 1910.
- 28. "Methods of Recording Dental Operations in Residential and Elementary Schools," by Vernon Knowles, L.D.S.Eng., November 14th, 1910.
- 29. "Some Inquiries as to the Causation of Dental Caries," by A. Hopewell-Smith, l.r.c.p., m.r.c.s., l.d.s.eng. Dental Surgeon and Lecturer in Dental Anatomy and Physiology, Royal Dental Hospital of London, March 20th, 1911.
- 30. "The International Hygiene Exhibition in Dresden," by C. PEYTON BALY, L.R.C.P., M.R.C.S., L.D.S.ENG. (Delegate from the School Dentists' Society), September 25th, 1911.
- 31. "The Education of the Public," by R. Denison Pedley, f.r.c.s.edin., m.r.c.s., l.d.s.eng., September 25th, 1911.
- 32. "School Dentistry in Sheffield," by John Derry, Esq., J.P., Chairman of the Sheffield Education Committee, October 19th, 1911.
- 33. "A New and Improved Tooth Brush," by F. Silva Jones, M.B., B.S., L.R.C.P., M.R.C.S., November 30th, 1911.
- 34. "The Starting of School Dental Clinics—Mode of Procedure in London," by F. Breese, L.D.S.ENG., March 21st, 1912.

#### List of Papers.—Continued.

35. "The Starting of School Dental Clinics—Mode of Procedure in Kettering," by BRYAN J. WOOD, L.D.S.ENG., March 21st, 1912.

36. "The Starting of School Dental Clinics—Mode of Procedure in Reading," by VERNON KNOWLES,

L.D.S.ENG., March 21st, 1912.

37. "Work in a Poor-Law School Dental Clinic," by S. F. Rose, L.R.C.P., M.R.C.S., L.D.S.ENG., June 20th, 1912.

38. "Bromley School Dental Clinic," by R. W. GRIFFIN,

L.D.S.ENG., June 20th, 1912.

39. "The Relationship between Dental Disease and Tuberculosis, as it effects the Public Health," by R. Denison Pedley, f.r.c.s.edin., m.r.c.s., L.d.s.eng., November 18th, 1912.

40. "Status, Remuneration, Duties, and Conditions of Service of School Dental Officers," by C. Doswell Wallis, L.D.S.ENG., November 18th,

1912.

41. "The Beckenham Elementary School Clinic," by A. J. Adkins, M.D.Lond., M.R.C.S., L.R.C.P., D.P.H., L.D.S.I., December 16th, 1912.

# DENTAL REQUIREMENTS FOR NAVAL RECRUITS.

The condition of a candidate's teeth is a most important point, and very great care should be exercised in examining them.

Five teeth defective or deficient in candidates for entry as Boy, 2nd class, and seven teeth defective or deficient in other persons under 17 years of age on the day of entry, ten defective or deficient teeth in persons above the age of 17, provided none of them can be rendered serviceable by dental repair, are to be considered generally as disqualifying a candidate; but both classes of

persons should possess some sound opposing molars and incisors on both sides.

The numbers of defective teeth given above are intended as a general guide, but the rule is not to be too rigidly adhered to if the remaining teeth are in good condition, or can be made so, and are likely to remain serviceable for at least twelve years.

Credit is to be given for teeth which have not erupted.

# DENTAL REQUIREMENTS FOR ARMY RECRUITS.

That the recruit possesses a sufficient number of sound teeth for efficient mastication.

The acceptance or rejection of a recruit on account of loss or decay of several teeth will depend upon the consideration of the relative position of the sound teeth; thus the loss of several teeth contiguous to each other may be a cause for rejection, but not the loss of a similar number if those remaining are so distributed as to permit of efficient mastication. Again, the loss of many teeth in a man of an indifferent constitution would point to rejection, while a thoroughly robust recruit who has lost an equal number might be accepted.

## POOR-LAW DENTAL APPOINT-MENTS.

# THE STATUS AND SUPERANNUATION OF THE POOR-LAW DENTAL OFFICER.

A Poor-Law Dental Officer's Appointment is subject to the sanction of the Local Government Board, and is usually renewed from year to year. The Dentist has not the same right of appeal to the Local Government Board as some other Poor-Law Officers have, and a Dentist's appointment can be determined by the Board of Guardians without the sanction of the Local Government Board.

The Poor-Law Dental Officer is entitled to Superannuation under the Poor-Law Officer Superannuation Act, 1896. 2% of the Officer's salary is deducted by the Board of Guardians as the Officer's contribution to the Superannuation Fund. On reaching the age of 65 years, the Officer is entitled to a superannuation allowance equivalent to one-sixtieth part of his average salary during the preceding five years for each year of service in the Poor-Law; so that if an Officer has been in the Poor-Law Service for thirty years he would be entitled to thirty-sixtieths (that is one-half) of his average salary during the five years preceding his retirement. In the event of the Guardians determining the appointment owing to the services of the Dentist being required no longer, then the contributions deducted in respect of the Superannuation Fund would be returnable to the Dentist.

# UNIONS AND DISTRICT SCHOOLS in which DENTISTS have been appointed with the sanction of the Local Government Board.

The conditions of these appointments vary considerably, but since the year 1892 fully equipped Dental Clinics have been established in many of these Schools.

#### LONDON.

Unions, &c.

Bermondsey ... J. S. Macfarlane.

Fulham ... F. Holding.

Greenwich ... W. W. Whittington.

Hackney ... J. T. Hankey.

,, ... C. D. Outred.

## Poor Law Dental Appointments .- Continued.

Unions, &c.		Name of Dentist.
Holborn	* * *	C. E. CARTER.
Islington		H. Love.
Lambeth		F. Breese.
Mile End Old Town		C. D. OUTRED.
Poplar Borough	* *	F. J. F. ROOKE.
St. George-in-the East	• • •	R. H. CUMINE.
St. Marylebone	• • •	C. E. WALLIS.
St. Pancras	• • •	WILLIAM FISK.
Shoreditch		C. D. OUTRED.
Stepney		J. A. Rose.
Strand		H. J. STEVENS.
Whitechapel	• • •	J. A. Rose.

## PROVINCES.

Unions, &c.		Name of Dentist.	
Arlesford	• • •	• • •	A. E. LEECH.
Ashton-under	r-Lyne	• • •	J. C. PAYNE.
Atcham	• • •	• • •	R. KING.
Bedwellty	• • •	• • •	E. H. MUSGROVE.
Birmingham	•••	• • •	W. H. TREGEA.
,,	•••		W. T. ELLIOTT.
Blackburn	• • •	• • •	J. J. SHORROCK.
Bolton	• • •		T. H. Wood.
Bosmere and	Claydon	• • •	P. J. Quinton.

# Poor Law Dental Appointments.—Continued.

Unions, &	·c.		Name of Dentist.
Brentford	• • •		F. W. Jones.
Brighton	• • •		R. J. Messent.
Burnley	• • •		T. Jackson.
Carlisle	•••	• • •	W. H. PARK.
Chesterfield			T. Furness.
Clutton	• • •		W. ROYAL.
Cockermouth		• • •	T. A. Edmondson.
Coventry	• • •		S. C. HARRIS.
Croydon	• • •	• • •	P. PHELPS.
Darlington			B. F. Cooper.
East Preston	• • •	• • •	L. TAYLOR.
Ecclesall Bierl	.ow		C. C. Drabble.
Edmonton	• • •		F. W. Jones.
Fylde The	• • •		W. H. Buckley.
Gateshead			C. L. ROUTLEDGE.
Gainsborough		• • •	G. A. Wood.
Guisborough	• • •	• • •	H. F. BINNS.
Haslingden	• • •	• • •	Maden & Son.
Hendon	• • •		C. Mullord.
Hungerford an	nd Ramsb	ury	J. W. WADDINGTON.
Huntingdon	• • •	• • •	F. Ellis.
Ipswich	• • •	• • •	H. L. TRACEY.
Kingston-upon	-Hull	wn a	L. H. BERGMAN.
Leicester			C. H. BAXTER.
Lincoln		• • •	E. P. UTTLEY.
Liverpool		• • •	S. E. TAYLOR.
Manchester			E. Houghton.
Merthyr Tydv	il		W. M. Jones.
Nantwich	• • •	• • •	J. H. PARSONAGE.

# Poor Law Dental Appointments.—Continued.

Unions, &c.		Name of Dentist.
Neath	• • •	W. H. TRICK.
Northwich	•••	W. LEE.
Nottingham		G. W. HARRIS.
Oldham	• • •	Т. В. Ѕмітн.
Oxford	• • •	E. C. H. JESSOP.
Redruth	• • •	T. L. FIDDICK.
Rotherham		G. H. Lodge.
St. Ives	• • •	F. Ellis.
Salford	•••	B. J. Rodway.
Sheffield	• • •	C. C. Drabble.
Southampton		D. K. WHITLOCK.
South Manchester	•••	J. Stephenson.
Stockport	• • •	T. GIBBONS.
Stockton		J. CAMERON.
Stoke-on-Trent	• • •	J. A. Jones.
Sunderland	•••	J. E. HANNA.
Watford	• • •	WILLIAM FISK.
Wellington (Somerset)	•••	E. FARRANT.
West Derby	• • •	S. E. TAYLOR.
"	•••	A. O. CALLAND.
West Ham	• • •	C. F. Rose.
Whitchurch (Salop)	• • •	E. H. FISHER.
Willesden	• • •	E. C. Fisk.
Wimborne and Cranbo	rne	L. B. Myers.
Wirrall	• • •	E. TAYLOR.
Wolverhampton	• •	E. V. KNIGHT.
Yeovil	• • •	H. HELYAR.
York	• • •	W. HOPTON.

## Poor Law Dental Appointments.—Continued.

District Schools.\*

Name of Dentist.

Central London School District (Hanwell Schools).

... S. F. Rose.

North Surrey School District (Anerley Schools).

... G. Marshall.

North Surrey School District (Broadstairs Schools).

... G. MARSHALL.

West London School District (Ashford Schools).

... Т. J. F. ROOKE.

Kensington & Chelsea School District (Banstead Schools).

Kensington & Chelsea School District E. KEEN. (Hammersmith Schools).

Farnham and Hartley Wintney School
District (Aldershot) ... H. MASHALLSAY.

Walsall and West Bromwich ... W. TREGEA. School District.

The total number of Children of school age (3 to 14 years) maintained by Poor-Law Authorities on the 1st January, 1912, was 59,158. These figures are interesting when compared with those given on pages 39, 72-73.

<sup>\*</sup> District Schools are formed by two or more Unions joining together in the maintenance of one establishment.

## METROPOLITAN ASYLUMS BOARD.

Institutions for Improvabl	e	
Imbeciles.		Name of Dentist.
Darenth Industrial Colony (Dartford, Kent).	• • •	C. E. Wallis.
Bridge Industrial Home (Witham, Essex).	•••	F. W. S. METCALFE.
Institutions for Children—Sick and Convalesce		
Queen Mary's Hospital (Carshalton, Surrey).	• • •	F. St. J. STEADMAN.
Park Hospital (Hither Green, Lewishan		S. B. Newton.
·		E. A. Blomfield.
East Cliff House (Margate).	• • •	E. A. Blomfield.
Millfield (Rustington, Worthing).	* * *	P. J. PEATFIELD.
Ringworm School.		
The Downs School (Sutton, Surrey).	•••	EUSTACE WHITE.
Ophthalmia Schools.		
White Oak School (Swanley Junction, Kent		A. J. Adkins.
High Wood School (Brentwood, Essex).		A. V. Brimmer.
Training Ship for Boys.		Enwin
T. S. Exmouth (Off Grays, Essex).	•••	EDWARD KEEN.

## BOARD OF EDUCATION.

# Arrangements and Appointments for Dental Treatment made by

## LOCAL EDUCATION AUTHORITIES.

Aberdare and | Dental Clinic, Whole-tine Dentist.-

J. ISHERWOOD SHORROCK. Mountain Ash Beckenham ... Dental Clinic, Part-time Dentist, one half day per week.—A. J. ADKINS. Dental Clinic, Part-time Dentist one Bexhill . . . half day per week.—C. H. Bradnam. Central; Dental Clinic at Dental Hos-Birmingham (i) pital. Afternoons only. Two Half-time One Whole-time Dentist (on Dentists. duty elsewhere in the mornings). Aston; Dental Clinic, Whole-time Dentist. (ii)(iii) Selly-Oak; Dental Clinic, Whole-time Dentist. (iv) Handsworth; Proposed Dental Clinics probably working by June, 1913. (v) The names of the officers appointed up to the present time are as follows:— Half-time—Norman A. Austin, Arthur J. HARRINGTON; Whole-time—Augustus J. Kelsey, C. F. Moxley. Dental Clinic, Whole-time Dentist.— Bradford JOHN KNOWLES. Contribution to Dental Hospital. Brighton

W. A. GANT.

Bromley (Kent)

Cambridgeshire (Stapleford

& Shelford).

Dental Clinic, Part-time Dentist, two

Dental Clinic, Part-time Dentist.—

half days per week.—R. W. GRIFFIN.

## Local Education Authorities Appointments, &c.—Continued.

Cambridge ... Dental Clinic, two Whole-time Dentists.
—WILLIAM JONES, PERCY G. RICHARDS.

Chatham ... Dental Clinic, Part-time Dentist, one half day per week.—A. B. Cole.

Chester ... Dental Clinic, two Part-time Dentists, each working two hours for two days per week.—Joseph Morrey, William Sterndale Bennett.

Coventry ... Dental Clinic, Whole-time Dentist.— G. COTTERELL.

Derbyshire ... Clay Cross Provident Club—Contribution towards dental treatment at Clay Cross School Clinic by a Part-time Dentist.—
HAROLD SMITH.

Eastbourne ... Dental Clinic, Part-time Dentist, one half day per week.—A. H. PICKETT.

Finchley ... Dental Clinic, Part-time Dentist, one half day per week.—A. G. HEYDON.

Guildford ... Dental Clinic, Part-time Dentist.—H. Chas. Colver.

Harrogate ... Dental Clinic, Part-time Dentist, one half day per week.—F. C. WILSON.

Hove ... Dental Clinic, two Part-time Dentists, each working one half day per week.—
W. Hamilton Erby, C. P. Tessier.

Kettering ... Dental Clinic, Part-time Dentist, one half-day per week.—BRYAN WOOD.

Lancashire ... Equipment and maintenance of Dental Clinic at Great Crosby, Dental services free.—A. CLEAVER, L. D. THOMPSON.

## Local Education Authorities Appointments, &c. — Continued.

- London (i) Blackfriars, St. George's Dispensary, two Part-time Dentists, five half days per week.—F. Breese, L. F. Guan-ZIROLI. Deptford, Children's Health Centre, (ii) Part-time Dentist, eight half days per week .- B. North. (iii) Fulham, Medical Treatment Centre, Part-time Dentist, four half days per week.—T. VERNON. Norwood, Medical Treatment Centre, (iv)two Part-time Dentists, four half days per week .-- C. E. CARTER, J. BLACK. Poplar Hospital, Part-time Dentist, five (v) half-days per week.—LEONARD BALLS. Marylebone General Dispensary, (vi) Part-time Dentist, three half days per week.—VINCENT DENNE. Wandsworth, Medical Treatment Centre. (vii)
- Dental Clinic, Whole-time Dentist.— Norwich . . . H. E. BAMPTON.

B. A. J. SMART.

three Part-time Dentists, six half days per week .- G K. NEALE, T. E. TOWNSEND,

- Dental Clinic, Part-time Dentist, two Reading . . . half days per week.—VERNON KNOWLES.
- Dental Clinic, Whole time Dentist.— Sheffield . . . PERCY BARTLE.
- Whole-time Dentist.—HARRY STURTON. Somerset
- Dental Clinic, Whole-time Dentist.-Southport . . . JOHN DUGUID.
- Dental Clinic, three Part-time Dentists, Swansea each working one half day per week.— T. GRIFFITHS, T. B. TUSTIAN, T. WATKINS.

## Local Education Authorities Appointments, &c. - Continued.

Torquay	•••	Dental Clinic, two Part-time Dentists each working one half day per week.— L. STRANGWAYS, J. G. TURLE.	
Warrington	***	Dental Clinic, two Part-time Dentists each giving six hours per week.—H. H. TAYLOR, H. FRANKISH.	
West Ham	• • •	Dental Clinic, Whole-time Dentist.— L. K. Percy.	-
Worthing		Dental Clinic, Part-time Dentist, one half day per week.—C. Doswell Wallis	
Number of	Toca	al Education Authorities 322	2
		al Education Authorities 322 ublic Elementary Schools in	٥
		d Wales 20,846	ó
		provided by Public Elementary	
Schools		6,807,540	)
		holars on registers of Public	
Elemen		Schools:—	
	E1	ngland 5,614,000	
	VV	vales 453,075	
(See also	pag	ges 34, 72-73).	)

# ADMIRALTY.

The Admiralty Training Establishments are looked after as regards teeth by civilian Dental Surgeons appointed by the Admiralty.

## WAR OFFICE.

The arrangements for Dental Treatment at the Duke of York's and other similar Military Schools are in the hands of the School Authorities, and no definite appointments of Dentists are made by the War Office.

## HOME OFFICE.

- A List of Dental Appointments made with the sanction of the Home Office in
- (a) Reformatory Schools, (b) Industrial and Short Term Industrial Schools, and (c) Day Industrial Schools, which have been certified and sanctioned by the Secretary of State for the Home Department, or the Secretary for Scotland, under the provisions of the Reformatory and Industrial Schools Acts and the Acts relating to the same.

## (a) REFORMATORY SCHOOLS.

## ENGLAND.

## BEDFORD:-

Bedfordshire Reformatory for Boys, Carlton, Sharnbrook, Bedfordshire.—W. Andrews.

## CHESTER:-

Bradwall Training School for Boys, Sandbach.
—J. Shields.

Akbar Nautical School for Boys, Heswall, Birkenhead.—D. Q. DINN.

Kempthorne House Auxiliary Home for Boys, 533, New Chester Road, Rock Ferry. In connection with the above School and Liverpool Farm Reformatory.

## DEVON:-

Devon and Exeter Reformatory Farm School for Boys, Whipton, Exeter.—J. A. MALLETT.

Devon and Exeter Reformatory for Girls, Polsloe Road, Exeter.

## DURHAM:-

Sunderland Reformatory for Girls, 3, Tatham Street, Sunderland.—S. HUTCHINSON.

## Essex:—

- "Cornwall," Thames Reformatory School Ship for Boys, off Purfleet.—Dr. W. Brown.
- St. John's Reformatory for Roman Catholic Boys, Shern Hall Street, Walthamstow, E.—ROOKE, —BOXALL.

#### GLAMORGAN:—

Glamorganshire Reformatory for Boys, Ty Segur, Neath.—N. H. MEDHURST.

#### GLOUCESTER:-

- Hardwicke Reformatory for Boys, near Gloucester.— W. H. Fox.
- Kingswood Reformatory for Boys, near Bristol.—C. G. Plumley.
- Arno's Court Reformatory for Roman Catholic Girls, Arno's Vale, Bristol.—Burnett.
- Red Lodge Reformatory for Girls, Bristol.—F. F. HATTON.

## HERTS:—

Herts Reformatory for Boys, Chapmore End, Ware.
—W. S. LACEY.

## LANCS.:-

- Liverpool Reformatory Farm School for Boys, Newton-le-Willows.—E. Entwistle.
- Shrewsbury House Boys' Home, Portland Place, Roscommon Street, Liverpool, in connection with Protestant Reformatories.
- Liverpool Reformatory for Girls, 6, Mount Vernon Green, Liverpool.—J. H. Burroughs.
- Farnworth Nautical School for Roman Catholic Boys, Farnworth, Widnes.—E. Schofield.
- The Fylde Farm School for Boys, Poulton-le-Fylde, Preston.—W. H. BUCKLEY.

## LANCS.—continued.

Birkdale Farm Reformatory School for Roman Catholic Boys, Birkdale, near Southport.—H. L. Whitlow.

Parkhill Girls' Training Home, 9, Park Hill Road, Liverpool.—J. H. Burroughs.

"The Willows" Auxiliary Home for Girls, Mount Vernon Green, Liverpool. In connection with Liverpool Girls' Reformatory and Parkhill Girls' Training Home.

Lancashire Reformatory for Roman Catholic Girls, May Place, Old Swan, Liverpool.—Powell.

## MONMOUTH:

Monmouthshire Reformatory for Boys, Little Mill, near Pontypool.—C. A. BURPITT.

#### NORTHAMPTON:—

Northamptonshire Society's Reformatory for Boys, Tiffield, near Towcester.—F. A. HUSBANDS.

## NORTHUMBERLAND :-

Netherton Training School for Boys, Netherton, near Morpeth.—L. RICHTER.

## SUFFOLK:-

Kerrison Reformatory for Boys, Thorndon, Eye.
—A. F. Penravon, P. S. Quinton.

Reformatory School for Girls, Blackhorse Lane, Ipswich.—H. TINDALL.

## SURREY:-

Philanthropic Society's Farm School, Reformatory for Boys, Redhill.—A. GABELL, A. H. GABELL.

## WARWICK:-

Norton Boys' Home, Bordesley Green, Small Heath, Birmingham.—T. MATTHEWS.

## WARWICK .- continued.

Warwickshire Reformatory for Boys, Weston, Leamington.—G. D. Ross Watt.

Warwickshire Reformatory for Girls, Kenilworth.—G. D. Ross Watt.

St. Michael's Reformatory for Girls, Charlotte Street, Leamington.

#### WILTS:

Wilts Reformatory for Boys, Warminster.—C. G. Plumley.

## WORCESTER :--

Stoke Farm Reformatory for Boys, Stoke Works, near Bromsgrove.—J. Westwood, A. D. MILLER.

## YORK:—

Calder Farm Reformatory for Boys, Mirfield.—S. MITCHELL.

'Rock House' Auxiliary Home, Duke Street, Ravensthorpe. In connection with the above School.

Castle Howard Reformatory for Boys, Welburn, York.—Dr. C. W. Botwood.

Leeds Reformatory for Boys, Adel, Leeds.—P. T. Leigh.

St. William's School for Roman Catholic Boys, near Market Weighton.—T. J. WILLIS.

## SCOTLAND.

## EDINBURGH:-

Dalry Reformatory for Girls, Loanhead, Edinburgh.—G. F. Scott.

Wellington Farm Reformatory for Boys, Leadburn, Midlothian.—R. PRINGLE.

## FORFAR:-

Rossie Reformatory for Boys, Montrose.—H. G. H. COWELL.

## LANARK:-

House of Refuge for Girls, East Chapelton, Bearsden, Glasgow.—S. W. McCracken.

Parkhead Reformatory for Roman Catholic Boys, West Thorn, Tollcross, Glasgow.—J. Buntin.

#### RENFREW:

Kibble Reformatory for Boys, Paisley.—D. CRERAR.

## Wigtown:—

Stranraer Reformatory for Boys, Stranraer.—R. THOMSON.

## (b) INDUSTRIAL SCHOOLS.

s. denotes Special Industrial School.

## ENGLAND.

#### Berks:-

Girls' Industrial School, Hill House, Cold Ash, near Newbury.—G. MALLET.

## CARMARTHEN :-

London County Council Auxiliary Home, "Crug-mawr," Latimer Road, Llandilo.

## CARNARVON:—

"Clio" Industrial School Ship, Menai Straits, Bangor.—G. WILLIAMS.

## CHESTER:—

Albert Memorial Industrial School for Boys, Corporation Road, Birkenhead.

Stockport Industrial School for Boys, Offerton Lane, Stockport.—C. H. CARRINGTON.

Stockport Industrial School for Girls, Dialstone Lane, Stockport.—C. H. CARRINGTON.

Macclesfield Industrial School for Boys, Brook Street, Macclesfield.—W. J. Bates.

Bishop Brown Memorial Industrial School for Roman Catholic Boys, Stockport.—T. Gibbons.

Auxiliary Working Boy's Home to ditto, Stockport.

#### CORNWALL:-

"Mount Edgcumbe" Industrial School Ship, for Counties of Devon and Cornwall, at Saltash. Tender to the above, "Goshawk."

## CUMBERLAND :-

Cumberland County Industrial School for Boys, Cockermouth.—L. BILLINGTON.

Chadwick Memorial Industrial School for Roman Catholic Boys, Stanwix, Carlisle.—T. W. Morton.

#### DEVON:-

Devon and Exeter Industrial School for Boys, Exminster, Exeter.—J. A. MALLET.

Plymouth Girls' Industrial School, 14, Portland Villas, Plymouth.—E. E. Jewers (Hon.).

## DORSET:—

Dorset County Industrial School for Boys, Milborne St. Andrew, Blandford.—C. PRIDEAUX.

Dorset Home Industrial School for Girls, West Street, Poole.—A. Holmes.

## DURHAM:-

Durham County Industrial School for Boys, Earl's House, Witton Gilbert, Durham.—F. T. HAYCROFT.

Sunderland Industrial School for Boys, Prospect Row, Sunderland.—E. A. Pollock.

"Wellesley" Industrial School Ship for Boys, North Shields.—C. F. Sutcliffe, T. F. Sutcliffe.

Green's Home Industrial School for Boys, Mile End Road, South Shields, in connection with the "Wellesley."—C. F. Sutcliffe, T. F. Sutcliffe.

Abbot Memorial Industrial School for Boys, Gateshead.—S. Brown.

Sunderland Industrial School for Girls, 4, and 5, Tatham Street, Sunderland.—S. HUTCHINSON.

St. Joseph's Industrial School for Roman Catholic Girls, Carmel Road, Darlington.—R. G. Brebner.

## Essex:—

- Essex Industrial School for Boys, Primrose Hill, Chelmsford.—I. Street.
- St. Nicholas' Industrial School for Roman Catholic Boys, Manor Park, E.—W. WILMORE.
- Auxiliary Home, 164 and 166, Sheringham Avenue, Manor Park, E.
- Halstead Industrial School for Girls, Halstead.— A. GOODEY.
- s. St. John the Baptist Special Industrial School for Roman Catholic Boys (Ophthalmic cases), The Manor House, Chigwell.
  - London County Council Auxiliary Home, 68, New Road, Grays, Essex.

#### GLAMORGAN:-

- "Mars" Auxiliary Home, 219, Penarth Road, Cardiff.
- Swansea Industrial School for Boys, Bonymaen, near Swansea.

## GLOUCESTER:

- Park Row Industrial School for Boys, Bristol.— W. J. Duncalf.
- Clifton Industrial School for Boys, Clifton Wood, Bristol.—T. H. Jennings.
- The National Nautical School, Portishead, Bristol.—S. HATCH.
- Tender to the above, "Polly."
- Bristol Industrial School for Girls, Stanhope House, 14, Somerset Street, Kingsdown, Bristol.—Weeks, E. F. Smart.
- Carlton House Industrial School for Girls, Southwell, Street, Bristol.—M. Cross.
- s. Stoke House Special Industrial School for Mentally Defective Girls, Stapleton, Bristol.

## GIOUCESTER.—continued.

s. Ivy Lodge Special Industrial School for Mentally Defective Boys, Stoke Park, Stapleton, Bristol.

#### HANTS:-

Purbrook Industrial School for Boys, Cosham.— H. A. Canning.

Milton Industrial School for Boys, Alexandra Road, Farnborough.—T. T. BARTON.

Portsmouth and South Hants Industrial School for Girls, Sydenham House, Waterloo, Cosham.—SIR T. SCOTT-FOSTER, (Hon.).

## HEREFORD :--

Herefordshire and District Working Boys' Home, Bath Street, Hereford.—P. G. LEVASON.

#### HERTS:-

Church Farm Industrial School for Boys, East Barnet.—W. W. GABELL.

London County Council Industrial School for Girls, Gisburne House, Watford.—E. KEEN.

s. St. Elizabeth's Special Industrial School for Roman Catholic Epileptic Children, Much Hadham.

## KENT:-

Kent County Industrial School for Boys, Kingsnorth, Near Ashford.—C. Peplow.

St. Vincent's Industrial School for Roman Catholic Boys, Dartford.—T. H. WILKINSON.

St. Vincent's Junior Industrial School for Roman Catholic Boys, Northwood Road, Whitstable.—W. H. Kendrick.

## LANCS.:-

Bolton Industrial School for Boys, Lostock Junction, Bolton.—C. E. MILL

Manchester Industrial School for Boys, Ardwick Green Manchester.

## LANCS.—continued.

- Auxiliary Home, 59, Ardwick Green, Manchester. Manchester Industrial School for Girls, Sale.—H. Dixon
- Barnes' Home Industrial School for Boys, Heaton Mersey, near Manchester.—J. H. EDWARD.
- St. Joseph's Industrial School for Roman Catholic Boys, Richmond Grove, Longsight, Manchester.
- St. Joseph's Working Boys' Home.
- St. Joseph's Industrial School for Roman Catholic Girls, Victoria Road, Victoria Park, Manchester.—
  TAYLOR.
- Liverpool Industrial School for Boys, 33, Everton Terrace, Liverpool.—C. F. Webb.
- Hornby Home for Working Boys in connection with above, 26, Village Street, Everton, Liverpool
- Liverpool Industrial School for Girls, 39, Northumberland Terrace, Liverpool.—C. F. Webb.
- Holy Trinity Industrial School for Boys, 77, Grafton Street, Toxteth Park, Liverpool.—E. L. COUNCELL.
- Auxiliary Home in connection with above, 67, Grafton Street, Liverpool.
- Holy Trinity Industrial School for Girls, Nile Street, Liverpool.—E. L. COUNCELL.
- Auxiliary Home for Girls, 52, St. Domingo Vale, Liverpool, in connection with Protestant Industrial Schools.—T. Burnett.
- St. George's Industrial School for Roman Catholic Boys, West Derby Road, Liverpool.
- Auxiliary Home, 47, Everton Road, Liverpool.
- Refuge for Roman Catholic Boys, 62, St. Anne Street, Liverpool.—A. O. CALLAND.
- Orphanage Industrial School for Roman Catholic Boys, Beacon Lane, Liverpool.—H. N. CLOTHIER.

## LANCS.—continued.

- St. Vincent's Auxiliary Home for Roman Catholic Working Boys, 105, Shaw Street, Liverpool.
- St. Bernard's Auxiliary Home for Roman Catholic Working Boys, 119, Shaw Street, Liverpool.
- Auxiliary Home for Roman Catholic Working Boys, Newman House, 99, Shaw Street, Liverpool.
- Nugent House Auxiliary Home for Roman Catholic Boys, 8, Canterbury Street, Liverpool.
- St. Thomas' Home Industrial School for Roman Catholic Boys, Preston.—H. H. EDMONDSON.
- Tulketh Hall Boys' Home, Preston, in connection with the above.
- St. Anne's Industrial School for Roman Catholic Girls, Freshfield, near Liverpool.—F. J. HARTLEY.
- St. Elizabeth's Industrial School for Roman Catholic Girls, 64, Breckfield Road South, Liverpool.

  —T. Burnett
- Blackbrook House, Industrial School for Roman Catholic Girls, St. Helens.—R. H. Lewis.
- s. Pontville Special Industrial School for Roman Catholic Mentally Defective Boys, Ormskirk.
- s. Dovecot Special Industrial School for Mentally Defective Girls, Pilch Lane, Knotty Ash.

## LEICESTER :-

- Leicester Industrial School for Boys, Desford, near Leicester.—Dr. C. H. BAXTER.
- Auxiliary Home for Boys, 132, Highcross Street, Leicester. In connection with Protestant Boys' Industrial Schools.

## LONDON :-

London County Council Industrial School, Highbury Grove, N. (Originally certified as a Truant School, March 12, 1891.)—H. R. Pring.

## LONDON.—continued.

- London County Council Industrial School for Little Boys, King's Avenue, Clapham Park, S.W.— F. K. Jeffes.
- s. London County Council Special Industrial School for Mentally Defective Boys, 50, Acre Lane, Brixton, S.W.
  - London County Council Special Industrial School for Little Boys, Stormont House, 75, Downs Park Road, Hackney Downs, N.E.—E. KEEN.
- s. London County Council Special Industrial School for Deaf Children, High Street, Homerton, N.E.
  - London County Council Industrial School for Girls, 54 and 56, Brixton Hill, S.W.—F. Breese.
  - East London Industrial School for Boys, Brookbank Road, Lewisham, S.E.—A. J. COLLETT.
  - Boys' Home Industrial School, Regent's Park Road, Primrose Hill, N.W.—R. LOVITT, (Hon.).
  - Field Lane Industrial School for Boys, Hillfield Road, West Hampstead, N.W.—E. C. Fisk.
- s. St. Vincent's Home Special School for Roman Catholic Crippled Boys, Clarence Road, Clapham, Park, S.W
  - Elm House Industrial School for Girls, Parson's Green, Fulham, S.W.—T. JEFFERIES.
  - King Edward Industrial School for Girls, Andrew's Road, Cambridge Heath, Hackney, E.—W. G. HATSON.
  - Montefiore House Industrial School for Jewish Girls, 69, Stamford Hill, N.—S. Jeffrey.
- s. St. Anne's Special Industrial School for Roman Catholic Girls (ophthalmic cases), Portobello Road, Notting Hill, W.—Lane,—White.
  - Grotto Home for Working Boys, 55, Paddington Street, Marylebone, N.W.

## LONDON.—continued.

Auxiliary Girls' Homes—

Marylebone Home, 24, Paddington Green, W.

Chelsea Home, 3, Smith Street, King's Road, S.W.

Hackney Home, 14, Sutton Place, Hackney, E. Peckham Home, 9, Albert Road, Peckham, S.E. Ealing Home, 31, Grange Park, Ealing, W.

#### MIDDLESEX:—

Hayes Industrial School for Jewish Boys, Hayes End, Middlesex.—M. White.

London County Council Industrial School for Girls, Gordon House, Richmond Road, Isleworth.— E. Keen.

Maurice Girls' Home Industrial School, 7, Mattock Lane, Ealing, W.—W. Green.

Industrial School for Roman Catholic Girls, Nazareth House, Richmond Road, Isleworth.—L. M. FAGGE.

s. Pield Heath House Special Industrial School for Roman Catholic Mentally Defective Girls, Hillingdon, Uxbridge.—F. G. 'SIMPSON.

St. Ursula's Industrial School for Girls, Amberley House, Hampton Road, Teddington.

## NORFOLK:

Buxton Industrial School for Boys, Buxton Lamas, near Norwich.—R. W. GILLETT.

## NORTHUMBERLAND: --

Newcastle-on-Tyne Industrial School for Boys, Jubilee Road, Newcastle.—H. Davis.

Northumberland Village Homes for Girls, Whitley-on-Sea, near Tynemouth.—P. E. Fox.

St. Vincent's Industrial School for Roman Catholic Boys, Brunel Terrace, Elswick, Newcastle-on-Tyne.—E. R. TRENDALL.

## Oxon:-

Girls' Industrial School, Shipton-under-Wychwood.

## SOMERSET :-

Somerset Industrial Home for Boys, Twerton, Bath. —F. H. WOODWARD.

Industrial School for Roman Catholic Boys, Cannington, near Bridgwater.—C. N. Brameld.

Industrial School for Girls, 17, Walcot Parade, Bath.
—F. H. WOODWARD.

## STAFFORD:-

Staffordshire County Industrial School for Boys, Werrington, Stoke-on-Trent.—R. J. Hall.

Boys' Farm Home, Standon Bridge, near Eccleshall.— J. Jones.

Staffordshire County Industrial School for Girls, Lichfield.—S. H. Roe.

s. Sandwell Hall Special Industrial School for Mentally Defective Boys, West Bromwich.

St. Winifred's Industrial School for Girls, Wolverhampton.—W. G. OWEN.

## SUFFOLK:-

Industrial Home for Boys, Walsham-le-Willows, Bury St. Edmunds.—W. Crasweller, (Hon.).

## SURREY:-

London County Council Industrial School for Boys, Mayford, near Woking.—C. E. Wallis.

Princess Mary Village Homes Industrial School for Girls, Addlestone, near Weybridge.—T. H. Power. Auxiliary Home in connection with the above School.

St. Mary's Industrial School for Roman Catholic Girls, Wellesley Road, West Croydon.—J. H. GLASSINGTON.

#### Sussex:—

Portslade Industrial School for Boys, Portslade, near Brighton. (London County Council and Brighton Education Committee.)—A. ROBERSON.

#### WARWICK:-

Birmingham Industrial School for Boys, Shustoke, Birmingham.—A. D. MILLER.

Harborne Industrial School for Boys, Balden Road, Harborne, Birmingham.

Girls' Industrial Home, Leicester Street, Coventry.—A. B. Jepson.

#### WILTS:-

St. Elizabeth's Industrial School for Roman Catholic Girls, Exeter Street, Salisbury.—F. GORDON.

#### YORK:-

Hull Industrial School for Girls, Park Avenue, Hull.—S. J. HARDING.

Leeds Industrial School for Boys, Shadwell Lane, Leeds.—G. A. Phillips.

Thorparch Industrial School for Girls, Thorparch, Boston Spa, Yorks.—A. S. Phillips.

York Industrial School for Boys, Marygate, York.—W. HOPTON.

York Industrial School for Girls, Lowther Street, York.—L. GLAISBY.

Middlesborough Industrial School for Boys, Linthorpe, Middlesborough.—H. T. BINNS.

Industrial School for Roman Catholic Boys, Shibden, near Halifax.—A. Robertshaw.

St. Vincent's Auxiliary Home for Roman Catholic Boys, Howarth Street, Claypit Lane, Leeds.

Bradford Catholic Working Boys' Home, 147, Grafton Street, Bradford.

## YORK.—continued.

Yorkshire Roman Catholic Girls' Industrial School, Howard Hill, Sheffield.—H. STONER.

Beckett Home Industrial School for Girls, Meanwood, Leeds.—F. Sherburn.

#### SCOTLAND.

#### ABERDEEN :-

Aberdeen Industrial School for Boys, Oakbank, Aberdeen.—W. WATT.

Aberdeen Female School of Industry, Whitehall, Aberdeen.—Dr. A. Watson.

Nazareth House Industrial School for Roman Catholic Girls, Claremont, Holburn, Aberdeen.—C. C. LYALL.

## AYR:-

Ayr Industrial School for Boys, St. Leonard's Road, Ayr.—G. F. Frew.

Auxiliary Home for Boys, King Street, Ayr.

Ayr Industrial School for Girls, Belmont Avenue, Ayr.—G. F. Frew.

Kilmarnock Industrial School for Boys.—J. M. Lipscomb.

## DUMBARTON:-

Clyde Industrial School Ship "Empress," off Row, near Helensburgh.—C. S. SINCLAIR.

## DUMFRIES:-

Dumfries and Maxwelltown Industrial School for Boys, Burns Street, Dumfries.—J. DYKES.

## EDINBURGH:-

Original Industrial School for Boys, Liberton, near Edinburgh.—R. Pringle.

## EDINBURGH.—continued.

Original Industrial School for Girls, Gilmerton, Edinburgh.—R. Pringle.

Auxiliary Home for Roman Catholic Working Boys, 52, Lauriston Place, Edinburgh.

Leith Industrial School for Boys, Lochend Road, Leith.—A. B. McNaughton.

Victoria Industrial School for Girls, Restalrig Road, Leith.—A. B. McNaughton.

## FORFAR:—

Arbroath Industrial School for Boys, Dale Cottage, Arbroath.

Dundee Industrial School for Boys, Baldovan, near Dundee.—D. L. Anderson.

Auxiliary Boys' Home, 7, Park Place, Dundee.

Dundee Industrial School for Girls, Balgay Park, Dundee.

Industrial School Ship "Mars," Dundee.—D. L. Anderson.

Tender to ditto, "Francis Molison."

## HADDINGTON:-

St. Joseph's Industrial School for Roman Catholic Boys, Tranent, near Edinburgh.—J. STEWARD.

## LANARK:-

Glasgow Industrial School for Boys, Mossbank, Millerston, near Glasgow.—W. R. TAYLOR.

Mossbank Auxiliary Home, Whitekale Street, Glasgow.

Glasgow Industrial School for Girls, Maryhill, Glasgow.
—J. WATT.

Auxiliary Home, 63, Rotten Row, Glasgow, in connection with the above School.

Glasgow Orphanage and Industrial School for Roman Catholic Boys, Kenmure, Bishopbriggs, Glasgow.—
J. Bryan.

## LANARK.—continued.

Glasgow Orphanage and Industrial School for Roman Catholic Girls, 72, Abercromby Street, Glasgow.—Dr. Fleming.

Slatefield Industrial School for Roman Catholic Boys, Gallowgate, Glasgow.

Dalbeth Industrial School for Roman Catholic Girls, Dalbeth House, Parkhead, Glasgow.—G. CLARK.

Auxiliary Boys' Home in connection with the "Empress," 120, North Montrose Street, Glasgow.

s. Waverley Park Special Industrial School for Mentally Defective Girls, Kirkintilloch.

## PERTH:-

Fechney Industrial School for Boys, Wells Hill, Perth.

—J. STEWART, (Hon.).

Perth Ladies' House of Refuge Industrial School for Girls, Craigie, near Perth.—A. Kelt.

Girls' School of Industry, Wells Hill, Perth.—A. Kelt. Auxiliary Girl's Home, 59, North Methven Street, Perth.

## RENFREW:-

Greenock Industrial School for boys, Captain Street, Greenock.—G. H. PATERSON.

Friendless Girls' Home, Brachelston Street, Greenock.—A. H. INGLES.

Paisley Industrial School for Boys, Thornly Park, Paisley.—D. Crerar.

## STIRLING:—

Stirling Industrial School for Girls.—J. W. Somerville.

## WIGTOWN :--

Industrial Home for Girls, Newton Stewart.—
J. COPLAND.

Note.—The Burghal Reformatory School, Poor House, Forest Row, Edinburgh, and the Govan Parochial School, Glasgow, Govan Poor House hold Industrial School Certificates, but Children are not committed to them for detention under the provisions of the Industrial Schools Statute.

## SHORT TERM INDUSTRIAL SCHOOLS.

(Formerly known as Truant Schools.)

#### ENGLAND.

## Essex:—

North London Short Term Industrial School, High Street, Walthamstow (for Tottenham, Hornsey, and Edmonton).—R. WILLIAMS.

West Ham Short Term Industrial School, Fyfield, Ongar.—F. R. Moser.

## GLAMORGAN:-

South Wales and Monmouthshire Short Term Industrial School, Quaker's Yard, Treharris, Glam.—W. H. Jones.

Cardiff and Barry Short Term Industrial School, Dinas Powis, Cardiff.—C. H. RICHES.

## LANCS.:-

Liverpool Short Term Industrial School, Hightown, near Liverpool.—Dr. Erskine Young.

## MIDDLESEX:-

London County Council Short Term Industrial School, Upton House, Urswick Road, Homerton, E.— H. J. STEVENS.

Chiswick and Heston Short Term Industrial School, Holme Court, Isleworth.—A. Lowe.

## STAFFORDSHIRE:—

Burton-on-Trent, Walsall, and West Bromwich Short Term Industrial School, Beacon Street, Lichfield.— A. J. HARRINGTON.

## YORK:-

Sheffield Short Term Industrial School, Hollow Meadows, near Sheffield.—P. Bartle.

## SCOTLAND.

#### LANARK:—

Glasgow School Board Short Term Industrial School, Shettleston, near Glasgow.—Dr. G. Hart.

## (c) DAY INDUSTRIAL SCHOOLS.

## ENGLAND.

#### GLOUCESTER:—

Bristol Day Industrial School, Temple Backs, Bristol.

#### Lancs.:—

South Corporation Day Industrial School, North-umberland Street, Liverpool.—Dr. Erskine Young.

Walton Road Day Industrial School, Liverpool.— Dr. Erskine Young.

Bond Street Day Industrial School, Liverpool (Closing).—Dr. Erskine Young.

Queensland Street Day Industrial School, Liverpool.—Dr. Erskine Young.

Addison Street Day Industrial School, Liverpool.—Dr. Erskine Young.

Manchester Day Industrial School, Mill Street, Ancoats, Manchester.

Salford Day Industrial School, Albion Street, Salford. Bootle Day Industrial School, Marsh Lane, Bootle.

## LONDON:—

London County Council Drury Lane Day Industrial School, Goldsmith Street, Drury Lane, W.C.—

#### STAFFORD:-

Wolverhampton Day Industrial School, Salop Street, Wolverhampton.

## YORK:-

Edgar Street Day Industrial School, Leeds.—G. A. Phillips.

#### SCOTLAND.

#### Edinburgh:—

Edinburgh School Board Day Industrial School, St. John's Hill.

#### LANARK:-

- Glasgow Day Industrial School, Green Street, Calton, Glasgow.
- Glasgow Day Industrial School, Rotten Row, Glasgow.
- Glasgow Day Industrial School, Rose Street, Hutcheson Town, Glasgow.
- Glasgow Day Industrial School, William Street, Anderston, Glasgow.
- Glasgow School Board Day Industrial School, Govan Street, Glasgow.
- Hopehill Road Day Industrial School, Glasgow.
- Glasgow School Board Day Industrial School, Cranstonhill, Hydepark Street, Glasgow.

# SUITABLE EQUIPMENT FOR SCHOOL DENTAL CLINICS

A suitable Equipment can be obtained at any Dental Depôt at an approximate cost of about  $\pounds$ 60. It is advisable that the Dentist appointed should be consulted as to his requirements, but it is essential to remember that in the operating room a good light and an adequate supply of hot and cold water are necessary.

N.B.—Schools are allowed a Discount of 15 per cent. off catalogue prices.

				£	s.	d.
A Dental Chair	•••	£	2 to	16	0	0
Cabinet	• • •			9	9	0
Bracket Table	• • •	•••		1	12	6
Spittoon (including Sal	iva Ej	ector)		6	5	9
Five pairs of Dental Fo	orceps	and an Ele	vator	2	10	0
Two Dental Probes, do	ouble e	nded	• • •		2	6
One Dental Engine w						
and No. 2 Right An	_	acnment		4	9	0
One gross of Burs, asso	orted		• • •	I	4	0
One dozen Excavators,	N.P.,	assorted			9	0
Two Chisels	• • •				2	6
Three Scalers	• • •	•••	• • •		3	0
Four Plastic Instrumer	nts				9	0
One Spatula	• • •	• • •	• • •		2	0
One Glass Slab	•••	• • •	• • •		I	0
One Glass Pestle and I	Mortar	• • •	•••		I	0
One College Tweezers			•••		3	0

## School Outsit.—Continued.

				£	s.	d.
One Amalgam Spoon	•••	• • •	•••		1	0
Five ounces Copper An	nalgam			:	13	6
One Bottle of Mercury	• • •	• • •				8
One Mercury Holder	• •		• • •		I	0
One packet Copper Pho	sphate C	emen	t		6	3
One packet Alloy	• • •	•••	• • •		6	0
One packet Cement	• • •	• • •	• • •		8	0
One packet Temporary	Gutta Pe	ercha	•••		2	0
One packet Permanent	Gutta Pe	ercha			2	0
One bottle Carbonised	Resin		• •		1	0
One Chip Syringe	•••		• • •		3	3
One Water Syringe	•••	• • •			7	6
Three Mouth Mirrors					3	0
One Spirit Lamp			• • •		2	0
½ lb. Absorbent Cotton	n-Wool	• • •			1	2
1/2 lb. Non-Absorbent C	otton-Wo	ool	• • •		1	2
ı lb. Cellulose Wadding	•••					9
One Waste Dressing Ho	older with	100	Cartons		2	6
One dozen Pulp-Canal	Drills	• • •	•••	1	0	0
Half dozen Pulp-Canal	Cleanser	S	• • •		2	0
One Nerve Instrument	Holder	• • •	• • •		1	3
One box Gutta-Percha	Pulp-Can	al Po	ints		1	3
One Pulp-Canal Plugger	r		• • •			10
One Sterilizing Tank (ga	as or spir	it)	• • •		6	0
One Crystal Glass Steri	lizing Vas	se	• • •		1	3
Devitalizing Paste	•••	• • •	•••		5	0
(or Devitalizing Fibre	e)	• • •			2	1
One Tube Novocain Ta	blets	• • •	• • •		1	6
Phenol, in Crystals		• • •	per oz.		1	3

# School Outfit.—Continued.

				£	S.	d.
Oil of Cloves	• • •	,	per oz.			10
Oxychloride of Zinc C	ement		• • •		4	0
One Bottle Paraform	• • •	• • •			I	0
Thymol, in Crystals	• • •				I	0
Tincture of Iodine			one oz.			IO
One Imperial Hypode	rmic S	Syringe			8	6
Mummifying Paste	• • •	•••	• • •		2	0
GAS APPARATUS, cons Stand with Upright, Aseptic 3-way Stop piece, and 2 100-9 with Nitrous Oxide	Bag, cock, gallon	Tubing, M Celluloid	Face-	8	5	0
Three Mouth-props					7	6
One Tongue Forceps	• • •				6	6
One Mouth Opener	• • •	• • •			16	6
One Sponge Holder					2	0
One box of Cotton Sw	rabs	4 * *			I	6
One School Dental Re	gister	(Bale & C	Co.)		15	0
Card Index Outfit (Ba	le & C	lo.)	net	3	3	0

# LOCAL GOVERNMENT BOARD CIRCULAR.

Dated July, 1897.

STATEMENT OF CONDITIONS RECOMMENDED FOR ADOPTION BY BOARDS OF GUARDIANS, OR OF MANAGEMENT, IN REGARD TO THE APPOINTMENT OF DENTAL OFFICERS.

The Officer appointed should be required:—
To attend at the school or other appointed place according to his agreement with the guardians or managers.

To inspect the teeth of all children admitted since his last visit.

From time to time, according to his agreement, to inspect the teeth of all the children in the school or workhouse, as the case may be.

To attend duly and punctually at each visit upon each child requiring dental treatment, and upon any child who may be brought to him for treatment in the intervals of such visits.

To keep a record of his work, and to report the same to the guardians or managers, in a book to be provided by them for the purpose, under the following heads:—

Date.

Number of children inspected.

- ,, temporary teeth extracted.
- " permanent teeth extracted.
- " teeth filled.
- " scalings.
- ,, other operations performed.

Any matters which the dental officer may deem necessary or desirable to bring to the notice of the guardians.

This book should ordinarily be kept at the school or workhouse, and should be laid before the guardians or managers by the clerk at each meeting, and should be produced to the Inspectors of the Local Government Board when required.

2. The dental officer must be duly registered in accord ance with the Statutes in that behalf (41 & 42 Vict. c. 33., 1878, and 49 & 50 Vict. c. 48., 1886), or if not so registered, by reason of any medical or surgical qualification exempting him from the obligation of registration as a dentist, the officer appointed shall produce satisfactory evidence that he holds a license in dental surgery from either of the following:—

The Royal College of Surgeons of England.

,, ,, Edinburgh. ,, ,, Ireland.

The Faculty of Physicians and Surgeons of Glasgow,

or other approved authority.

- 3. The guardians or managers may pay a dental officer either by
  - (a) an inclusive salary, or
  - (b) partly by salary, and partly by fees on a fixed scale for specified operations, provided that all payments for the extractions shall be included in the salary assigned to the officer and shall not be made by fee.
- 4. If the dental officer attends at the school or workhouse, it would be necessary that the guardians or managers should provide for his use a suitably equipped surgery, including a dental chair and a dental engine, and such other apparatus as may be necessary. It is desirable that they should also provide the requisite materials for fillings, and such special appliances as may be needed for mechanical treatment

Local Government Board, July, 1897.

# REMUNERATION OF SCHOOL DENTAL OFFICERS.

The School Dentists' Society suggest the following minimum rates of remuneration:

For one half-day's attendance per week, £50 per annum.

For whole-time service, £300 per annum, provided that the number of children does not exceed 5,000. A School population may vary from that number to more than 100,000; it is desirable, therefore, in fixing the salary to consider the extra duties that would devolve upon the Senior Dental Officer in the supervision of School Dental Officers, and the Senior's additional administrative responsibility where the School population is large.

Travelling and other necessary expenses to be paid over and above this.

N.B.—A "School week" is 5 days of  $5\frac{1}{2}$  hours= $27\frac{1}{2}$  hours.

A "School year" is 44 weeks, or not less than 400 half-days.

\* \* \* \* \* \* \* \*

Valuable assistance in a School Dental Clinic can be given by a Nurse experienced in the management of children. She can also attend upon the Dental Officer during inspection and treatment, assist in the clerical work, and look after the instruments.

# THE PRESENT CONDITION OF SCHOOL DENTISTRY, 1912.

## ENGLAND & WALES.

With some suggestions as to future needs.

School Dentistry has made rapid strides during the last few years, and its work is now gradually extending

over the juvenile population.

IN THE PUBLIC SCHOOLS, for example, Haileybury College, Marlborough College, Felstead, Uppingham, and schools of a similar type, special arrangements are made for dental service to be given at the schools. At Mill Hill School, the boys are inspected each term and a report is sent to the parents. The mode of procedure in these schools varies; but the importance of dental inspection and treatment is recognised, and necessary facilities for such are usually available.

RESIDENTIAL BENEVOLENT INSTITUTIONS, such as Dr. Barnardo's Homes, London Orphan Asylum, St. Anne's Asylum, including Orphanages for the care of children belonging to the working and middle classes. The children are either elected by subscribers' votes or selected by a committee. There are a number of these schools in England and they frequently make arrangements for dental supervision. At some of these schools dentists have been appointed for many years past and dental clinics (although not known by that name) have been maintained.

Poor Law Schools.—In these schools the dental service is becoming very general. In the larger schools, such as the Parish and District Schools of London, dental clinics have been in operation for years, and the standard of work obtaining is extremely good. Even now in the smaller boroughs dental arrangements are made, and the general tendency is to conform to the regulations recommended for adoption by the Local Government Board to Guardians when appointing dentists. These regulations, if compulsory, would make the dental service still more efficient. In many cases they have been adopted; and it

is hoped, and is probable, that before long the Local Government Board may be able to make these appointments regulations compulsory. (See Local Government Board Circular, dated July, 1897, on pages 63-64).

THE METROPOLITAN ASYLUMS' BOARD, who have the care of the feeble-minded children, have appointed several dentists to look after the children under their control.

INDUSTRIAL AND TRUANT SCHOOLS, of which a large number exist, are under the control of the Home Office, which has sanctioned the provision of dentists to a large proportion of these schools (see pages 40.59).

THE ELEMENTARY SCHOOL POPULATION numbers more than six millions. Medical and dental inspection has been for sometime carried out, and recently dental clinics have been established in London, under the L.C.C., and in many provincial towns by the local Education Authorities, and the number of these clinics is steadily increasing. These clinics, staffed by part-time and whole-time men, are usually well equipped. Provision is made for a surgery and waiting room; there is generally a nurse in attendance give assistance. So far, the authorities seem anxious to give the dentist every opportunity for carrying out his work efficiently and well. Much will depend upon the results obtained through the working of these clinics. The public have been told that they are to expect an improvement in the condition of public health, provided the teeth of the children are cared for; and although not interested in the mode of procedure adopted in working these dental clinics, they, no doubt, are looking forward to substantial results as the outcome of their working.

Sir George Newman, in a speech to the members of the School Dentists' Society, laid down four general principles for regulating school dentistry in England. These are:—(1) All arrangements for each area should be under the supervision of the school medical officer; (2) the inspection and selection of all cases should be carried out by the school dentist himself; (3) conservative dentistry, both for inspection and treatment, should concentrate upon a definite age period, six to eight years; and (4)

dental treatment should always be followed up by regular re-examination and, if necessary, renewed treatment. It is hoped that the new Exchequer grant of £60,000 will encourage local education authorities to further progress in this matter.

Sir George Newman, as Chief Medical Officer of the Board of Education, in his 1910 Report enlarged on these four general principles, and on pages 103-107 extracts from that Report are printed.

In the Poor-Law Service, dentists have not yet the same privileges as the medical officer. They have no fixity of tenure, nor an equal right of appeal to the Local Government Board that the medical officer has. Although they must subscribe to the superannuation fund and their appointments are sanctioned by the Local Government Board, nevertheless the Guardians have the power of terminating their engagements!

At present in the Elementary School Dental service the dentist has no security of tenure, the appointment being terminable at any time by the local education authority; there is no system of promotion in the service; and there is no scheme of superannuation in force.

As the Service will increase in extent and appreciation; so, it is anticipated, will many privileges accrue pari passu to the Dental Officer.

The work of the school dentists varies considerably. A school population may be anything from three or four thousand to upwards of 100,000; for example, a small town or a large city. It is generally considered that one dentist can deal with 5,000 children, but a large population means a considerable amount of work: such as arrangements for the efficient carrying-out of treatment, the supervision of assistant dental officers, the preparation of reports, and advising the Education Committee. He, also, would probably be expected to assist in making the service popular, in organising lectures for parents, and in overcoming difficulties that might arise from parents objecting to children being treated. Briefly and comprehensively, he may be called upon to maintain the efficiency of the clinics and to make the service popular with the public.

In order that the highest efficiency and the maximum return—in its widest sense—for the monetary expenditure may be secured for a National School Dental Service, the service ought to be made so attractive that a certain number of men will specialize and devote themselves entirely to it. But those who do so must first be assured of a career fitting to the natural aspirations of an educated professional The conditions of appointment—as to salary, fixity of tenure, promotion and superannuation—ought to be such that men who so specialize may be induced to remain in the service; and by this specialised experience and skill they will then be capable of filling the higher posts. The service would thereby not only attract capable men to the ordinary appointments, but there would also be inducement for them to remain therein and qualify for the needed administrative work in the large centres.

#### SCOTLAND.

Nothing was done in Scotland with regard to treatment of the teeth of Elementary School Children until 1910, when the Carnegie Dunfermline Trust instituted, in Dunfermline, a Dental Clinic for Board-School Children. Treatment is free. The dentist visits this clinic for 12 hours a week. Within the last few months, however, provision for School Dentistry has made a large advance.

In the Public Schools, such as Fettes, Loretto, Glenalmond and Merchiston Castle, arrangements are made by which the pupils are examined periodically and treatment given either by the school dentist, if the family dentist is too far away, or when the pupil is at home on holiday by the family dentist. A chart showing where attention is required is usually given which the pupil takes with him when he goes on holiday.

THE MERCHANT COMPANY SCHOOLS, EDINBURGH— The pupils are medically examined (1) on their entrance to the school, (2) on passing from the primary to the intermediate classes, and (3) on entering the post-intermediate classes. The inspection includes an examination of the teeth and is conducted by the Medical Officer of the district appointed by the School Board, unless in the cases when parents desire to have it done by the family doctor.

RESIDENTIAL BENEVOLENT INSTITUTIONS, such as John Watson's Orphan Hospital and Donaldson's Hospital in Edinburgh, have arrangements made for examination by local dentists. At John Watson's Hospital the inspection is made by a local dentist and fillings are put in at the Dental Hospital. A charge is made for extractions under an anæsthetic.

QUEEN VICTORIA SCHOOL, DUMBLANE.—There is an annual contract with a local dentist who visits the school twice a week. This contract covers extractions, fillings, &c. The boys at first dreaded a visit to the dentist, but now there is no trouble whatever and they go quite willingly.

QUARRIER'S HOMES, BRIDGE OF WEIR.—A qualified dentist visits the homes once a fortnight.

The Scottish National Institution for the Education of Imbecile Children, Larbert.—Very little is being done for the children. An attempt is made to keep their mouths clean. The better class patients have their mouths attended to by a local dentist as private patients; but the pauper cases have nothing done in the way of fillings, only the same dentist occasionally does necessary extractions.

REFORMATORY AND INDUSTRIAL SCHOOLS.—Dentists are appointed to and visit many of these Schools; in some instances the children are only sent to a dentist as necessity arises.

THE ELEMENTARY SCHOOLS, EDINBURGH.—In the case of infants examined, notices were sent only when the extent and nature of the decay were such as likely to interfere with the child's general health. About 30% of the cases notified did receive some attention—nearly all extractions.

A Government Grant has been allocated to Scotland, and the School Board have decided to give the portion

due to them to dental treatment, but only on the condition that the rates be not involved in the expenditure. Four dentists have been appointed and treatment is to be restricted to children from 6 to 8 years old. It is hoped that things will be ready for January 6th.

GLASGOW ELEMENTARY SCHOOLS.—Eight part-time dentists have been appointed. Two centres are fully equipped, the larger containing two equipments. At each centre there are, in addition to a waiting room, a room for operations and one for recovery. Nurses also have been appointed.

GLASGOW PARISH COUNCIL.—Arrangements have been made with various dentists in the districts where children are boarded-out, to examine and rectify any irregularities by extraction or otherwise. It is proposed to again examine the children dentally in six months.

ABERDEEN.—A Dental Clinic is being conducted in connection with the School Board's Medical Inspection department. Treatment is to be confined to children whose parents and guardians are in necessitous circumstances. Children requiring dentures will be supplied with them, and such attention to be given to the teeth of the children as is necessary to put them in a condition conducive to health.

DUNDEE.—Nothing is being done at present for the Elementary School Children, but the authorities are preparing to initiate a small clinic, in which there will be a dental department presided over by a qualified dentist.

RENFREW.—The School Board have decided that the grant of £50 from the Education Department for medical treatment shall be devoted to dental treatment. This treatment is to be reserved in the first instance for necessitous children whose parents are willing that they should receive it. Thereafter, it is to be extended to those whose parents have not attended to the notification sent them by the medical inspector, but who are willing that their children should receive dental treatment, a scale of charges being made by the Board for such cases. The qualified dentists appointed are D. Crerar and A. B. McDougall.

As regards medical and dental treatment of Elementary School Children, a special case was brought before the Court of Session and it was decided that the rates could not be used in that way. There being no clause in the Scottish Education Act which allows the public rates to be so used.

The number of Public Elementary Schools is 3369. The accommodation provided in these schools is for 1,077,289 children. The average number of scholars on the registers is 755,988.

#### IRELAND.

In Ireland, School Dentistry has made very little progress. That the need is as urgent as it is in other civilized countries, is proved by the deplorable condition of the adults' and children's teeth seen at the General Hospitals and the Dublin Dental Hospital. Statistics as to the prevalence of caries are not procurable, except in the case of the Lough Cutra National School, where an inspection in 1909 showed that the teeth of the children (about 200 in number) were apparently worse than those of English children of the same class.

The control of practically all the Irish Primary Schools is vested in the Board of National Education, who, as the central authority, are in a unique position to administer a broad scheme of dental treatment. The Commissioners are most sympathetic towards the movement, and have received from the Irish Branch of the British Dental Association a report as to the best mode of procedure. The Resident Commissioner of National Education (who in 1911 delivered an address on Dental Inspection in Irish National Schools, at the Health Congress, held that year in Dublin), and many other members of the Board are actively promoting the cause of School Dentistry.

Arising out of an application made to the Treasury by the Commissioners, and in consequence of grants from the State having been already made under Section 13 of the Education (Administrative Provisions) Act, 1907, to assist the local authorities in England and Wales to meet the cost of medical and dental treatment of school children, a sum of £7,500 was included in the Irish Education Estimates for the current financial year (1912-13) for similar purposes. The money, however, was voted on condition that an equivalent contribution should be made from local sources. The chief difficulty arises in connection with the equivalent contribution, and hitherto it has not been surmounted. In the opinion of a leading authority on Irish Local Government law it would be competent for the various Public Health Authorities to contribute towards special School Dental Hospitals; and possibly it is in this manner that the equivalent contributions may be obtained.

Amongst the districts which are discussing schemes of School Dental treatment are the following (the approximate number of children between 3 and 15 years old being shown in each case):—Belfast, 98,701; Dublin, 69,001; Limerick, 9,492; Athy, 863; Bushmills, 800. The total number of children in the Schools controlled by the Board of National Education in 1910-11 was 699,945.

ELEMENTARY SCHOOLS.—The only Districts in which School Dentistry is actually in operation are Lough Cutra and Kilkenny where the total cost is contributed privately. In the case of Lough Cutra a dentist remains in the district for two consecutive days in each month, thereby reducing the time taken up by a long train journey. He reports that the children are very keen upon having their teeth attended to, and that the health of the school has very greatly improved since the treatment was first undertaken three years ago. In the case of Kilkenny Woodworkers School, the beneficial result of treatment is equally noticeable. In both districts all the children are treated, the funds so generously contributed being sufficient for the purpose.

RESIDENTIAL BENEVOLENT INSTITUTIONS.—These are in many cases paying attention to the children's teeth. The Masonic Orphan Schools, Royal Hibernian Military School, Loughrea Convent of Mercy Orphanage, Female Orphan School, Dublin, Birds Nest, Kingstown, Royal

Hibernian Marine School, Sir Otto Jaffe's School, Belfast, and several others have the children's teeth regularly inspected, and the necessary treatment done. Others report that they arrange for their children to be sent to a dentist when required.

Poor Law Institutions.—The Local Government Board for Ireland by a General Order of the 5th July, 1901, direct that the Boards of Guardians should make certain appointments including that of the Dental Surgeon. The Dental Officers who are appointed are not removable by the Guardians but only by the Local Government Board. Only two Boards of Guardians have appointed dentists for regular treatment. The Belfast Work-house Schools, accommodating about 400 children, are regularly visited, and in addition about 100 boarded-out children are treated at the dentist's private surgery. Caries is found to be present in about 80% of the new cases. Treatment includes children up to 15 years. The Board have arranged for the supply of tooth brushes. The Workhouse School children in the South Dublin Union are being similarly treated. The total number of resident and boarded-out children is about 430. A few other Boards of Guardians report that the school children receive dental treatment when necessary.

INDUSTRIAL SCHOOLS.—Of these there are 58 in Ireland. In several, such as the Balmoral Industrial School, Belfast, the Meath Industrial School, Bray, Newtonforbes Industrial School, Co. Longford, the children are regularly inspected and treated. In some the condition of the teeth is reported to be fairly good.

#### AUSTRALIA.

By Mr. BROOKE NICHOLLS, of Victoria.

The question of the supervision of the teeth of Australian school children is making slow but steady progress.

The State of Queensland, in 1911, appointed the first Dental Officer to the Staff of the School Medical Officers.

This appointment was purely an experimental one on the part of the Department of Public Instruction, but so important and successful have been the results that, within a little over twelve months of its inception, two Assistant Inspectors have been appointed at a salary of £200 a year plus 101— a day travelling expenses. The Chief Dental Inspector is in receipt of a salary of £300 a year, with 12/6 a day travelling expenses.

The duties of the Dental Officer are that they shall examine all Schools throughout the State (which is of immense size, say a 1000 miles by 700 miles, but only sparsely populated inland). In Brisbane, gratuitous treatment is provided at the Brisbane Dental Hospital for necessitous cases, a special surgery being furnished by the Government for the purpose.

In the country schools such cases as the head teacher of the school declares to be unable to pay for treatment are treated gratuitously by the Dental Inspector at the conclusion of his inspection, a full travelling outfit being provided by the Department. All other cases are expected to obtain the necessary attention privately.

Besides the distribution of leaflets, lectures on Oral Hygiene are given to the children, parents and teachers.

Arrangements have been made through the Commission of Public Health, to carry out any research work, and the Chief Dental Inspector, Mr. E. W. Haenke, states, that he has "been able to gather some intensely interesting information and data, which may prove of practical value."

# DUTIES OF ASSISTANT DENTAL INSPECTORS OF SCHOOLS (QUEENSLAND).

- I. They shall be responsible to the Medical Inspector of Schools through the Chief Dental Inspector.
- 2. They shall inspect the teeth of all children attending the State Schools, and such other Schools as the Minister shall determine.
- 3. A thorough inspection shall be made of each child's mouth and each child supplied with a report recommending treatment where necessary. Such reports to be addressed in an envelope to each individual child, and distributed at the conclusion of the day's inspection.

- 4. A detailed record shall be kept of the condition of each child's mouth, in a manner outlined in the prescribed Inspection Forms, special care being paid to the extent of caries and the presence of any abnormal or pathological condition in the mouth.
- 5. At the conclusion of the Inspection of each school, such records shall be tabulated on the approved Report Forms and the results forwarded to the Chief Dental Inspector, a copy also being sent to the Head Teacher of the School.
- 6. In each School visited, the Head Teacher shall be consulted to ascertain if any of the children are of such destitute circumstances as to be unable to obtain the necessary treatment. Should any such cases present themselves, they shall be treated gratuitously, to the Inspector's best ability and in accordance with the principles and practice of Modern Dentistry. In undertaking all such cases discretion must be exercised, no case being taken in hand without the head teacher's recommendation.
- 7. They shall not be allowed the right of any private practice, and their attitude towards practising dentists must be of a strictly impartial nature.
- 8. Lectures shall be given in each school on the care of the teeth and in addition further instruction shall be given wherever possible to the parents and teachers on oral hygiene.
- of their proceedings for the week to date, with a programme of their work for the following week. Such weekly diaries shall be forwarded whether they are in the field or at home, or on sick leave, or otherwise absent from duty; and the particulars of work and travelling shall be sufficient to enable their work and travelling expenses to be checked by the Department.
- Instruction through the Chief Dental Inspector of Schools, at the end of each year, a full report on the results of their inspections and the different phases of their work.
- They shall perform such other duties as may be directed by the Minister, the Medical Inspector of Schools, or the Chief Dental Inspector of Schools.

In South Australia, Mr. Roy Sims, who was appointed in May, 1909, as Dentist to the wards and neglected child-

ren of the State, has had his appointment renewed for a further term of three years at £350 per annum. This appointment is one of an entirely different nature to the Queensland appointments.

The figures for the work of the year ending, June, 1912, are:—

- 772 Children examined.
- 1135 Fillings inserted.
  - 507 Extractions.
  - 252 Extractions (temporary teeth).
    - 14 Dentures.
      - 9 Dentures repaired.
    - 10 Crowns (Davis).
    - 52 Ether cases.
    - 67 Gum treatments (Pyorrhea).

Periodical trips are made to the country districts, where there are a sufficient number of children in one centre, and Institutions such as the Reformatories and Probationary Schools are visited every few months.

As the whole of the work is carried out by one individual the State children's Department of South Australia is to be congratulated upon its energetic Dental Officer.

Unfortunately for the school children of Victoria, New South Wales, West Australia and Tasmania, none of these States have a Public Dental Officer. Up to the present no dental clinics have been established, and the Municipalities have not yet done anything in this matter.

An Hygiene section has been established in connection with the Annual Exhibition of the Australian Natives Association (A.N.A.), to be held in Melbourne, in January, 1913. The Odontological Society of Victoria is to make an exhibit of specimens, charts, etc., pertaining to Oral Hygiene, and a series of lantern lectures will be given.

#### CANADA.

### Dr. G. K. THOMSON, of Halifax.

In Canada the dental education of the public, and the care of the teeth of poor school children have received more attention during the last two years than ever before.

The work of the Canadian Oral Prophylactic Association, The Canadian Dental Association, and Committees of each provincial society has been productive of excellent results. Ontario has made more progress in this work than the other provinces, although all are alive to the importance of the matter and the necessity of the establishment of free clinics in the larger cities.

In March, 1911, in Toronto, a dental inspector was appointed on the medical inspection staff of the Board of Education; and a public clinic consisting of three chairs, manned by six half-time salaried operators maintained by the City Council has been opened.

Public Clinics are about to be established in Ottawa, Guelph, and other cities.

In Quebec the school children's teeth are examined by physicians appointed by the City Council as medical inspectors. Children with bad teeth, representing about 94%, are sent to McGill & Laval College Dental Clinics, which receive a subscription or money grant from the city to do such work. They are endeavouring to have regular dental inspectors appointed.

In Winnipeg a public dental clinic is held in the general hospital two mornings a week. This has been in existence nearly a year, and is supported by the profession generally; but it is hoped that it will soon become a department of the hospital and be supported by the city, with at least one permanent superintendent.

In all the provinces, including Nova Scotia—the first province in Canada to have dental inspectors appointed to the public schools—illustrated lectures have been delivered, pamphlets of an educational nature distributed, and dental inspection of the teeth of school children performed.

Revision of dental matter in school books on Hygiene

is now receiving attention.

#### NEW ZEALAND.

By Professor H. P. PICKERILL, University of Otago, New Zealand.

The official recognition of School Dentistry in New Zealand has come somewhat late. In the past, many of the Public Elementary Schools have been examined dentally by members of the New Zealand Dental Association, and it has revealed a very alarming state of affairs.

The Government have now recognised the necessity of officially examining the teeth of the school children, and of advice being given to the parents, when required. This examination is being carried out by the Medical Inspectors of Schools, who have for the purpose undergone a special course of instruction at the Dental School of the University of Otago, and now show themselves to be not only quite efficient, but enthusiastic also in this special work. (We in New Zealand are very much of the opinion that this is the most logical and practical course to pursue, that the man who examines the child's ears, eyes, and throat, should also be in a position to examine the teeth and thus save time and money. The services of the Dental Surgeon should be reserved exclusively for treatment.)

In most of the large towns, dental hospitals or dental departments exist or are being established where primary school children are either treated free or the bare cost of the material used only is charged.

Members of the New Zealand Dental Association are actively engaged in lecturing in most of the centres to teachers and others, upon Dental and Oral Hygiene.

The New Zealand Dental Association recently gave evidence before the Royal Commission on Education here, and the Commission as a result have strongly recommended:—

- 1. The Dental Inspection of all school children.
- 2. The appointment of lecturers in all training colleges, to instruct teachers in the cause, effects, and prevention of dental disease.
- 3. The instruction of school children, by teachers, in the above subjects.

On the strength of the above recommendations and upon the returns of the School Medical Inspectors, it is hoped that it will be possible in the near future, to introduce legislation empowering the establishment of school dental clinics in every town in New Zealand.

## Further contribution by Mr. CLAUDE H. MOSES, Hon. Sec. Auckland Branch N.Z.D.A.

After much persistent agitation by the New Zealand Dental Association, the examination of State School children has been undertaken by the New Zealand Government.

The work is at present being carried out, in conjunction with the Medical inspection, by the Medical Officers recently appointed to the various districts, but no reports are as yet available.

In Auckland, where a Dental hospital has been established under the Hospital and Charitable Aid Board, inspection of State School children has been under way for some time, and four of the largest city public schools have already been completed. The examination here is carried out by the Dental Surgeon in charge of the hospital, assisted by members of the Honorary Staff, and the results show that fully 95% of the children are suffering from Dental Caries. Provision is made, as far as possible, for the necessary treatment, the children being entered on the hospital books as patients; but as the treatment is optional and resting as it does largely with the children, only a small percentage ever return to the hospital to receive that benefit.

Those whose parents cannot afford to pay a fee are admitted free, all others are charged according to work done; the rates are merely nominal, being no more than to cover expense.

Of the children attending those four Auckland city public schools, viz: Federal, Nelson, Napier, and Beresford Streets, the School Dentists' Committee report that the total number examined was 1857, ranging from 5 to 15 years of age. These had 7639 decayed permanent teeth, 3858 of which needed simple fillings to put them in good order, 1965 required complex fillings or pulp treatment, and 1816 were almost hopeless, though, possibly, some could be saved. Among the children whose ages ranged from 7 to 13 years only 80 had no decay in their permanent teeth=4'30%

As an indication of the progress of decay when unchecked it was found that between the ages of 7 to 10 years there were 62 children with no decay in permanent teeth, while between the ages of 10 to 13 years there were only 18 children with sound teeth.

It was also found that among the 1857 children examined there was an almost total lack of any effort on the part of the parents to have their children's teeth preserved, for only 50 had had any fillings done. One pleasing result of the examination, conducted so far, has been that over 100 children have presented for treatment at the dental hospital. Considering that the number eligible for treatment at this institution is limited this must be regarded as satisfactory.

# AMERICA (UNITED STATES).

By Dr. HERBERT L. WHEELER, New York.

The work has been carried on in a disconnected way in America for a period of ten years. Considerable headway has been made but not as much as could be desired.

Last year the Department of Health of the City of New York asked for an appropriation to establish nine school clinics, and to supply twenty-seven

dentists. This money was granted by the Board of Apportionment, but owing to some virulent political quarrels, the Board of Aldermen used a prerogative seldom adopted by them and cut this apportionment out of the Budget.

There are, however, in the city of New York three or four dental clinics, supported by outside benevolence, in which indigent children in the public schools may receive attention.

The Department of Health reports, under date of September 16th, 1912, that the nurses employed in the public schools of New York City have examined 230,243 children in the past year, out of which they found 166,368 with serious defects of the teeth. Of this 166,000 only about 15,000 succeeded in obtaining dental services. This does not include troubles of the temporary teeth at all. Instruction in Oral Hygiene has been given to 135,843.

It is understood that an appropriation for dental clinics will be asked for again this year by the Department of Health.

In the State of New York the Health Commissioner for the State has appointed four dentists as consultants and lecturers to the Department. These are co-operating with the Department of Education, and one lecturer alone delivered over sixty illustrated lectures before the public schools of the State of New York during the past year.

Rochester, Buffalo, Syracuse and Elmira (New York State), also have dental clinics, supported through the benevolence of their citizens.

So far as I know the best organization for practical work for school children of this order in this country, exists in Philadelphia, where there are organized, I believe, ten free dental clinics for the children of the public schools. One of these being in the City Hall. These are also under the direction and charge of the Department of Health. Their organization and establishment are largely due to the efforts of Dr. Kirk and Dr. McCullough.

Clinics have also been established in Washington

(D.C.), Baltimore (Maryland), Brookline, Boston and Worcester (Massachusetts), Newark (New Jersey), and a number of other eastern and southern cities.

In Chicago (Illinois), a dentist has been appointed as an official of the Department of Health, and school dental clinics are being gradually established there.

Cincinnati and Cleveland (Ohio), have one or more clinics. These latter being supported from benevolent sources.

Ann Arbor (Michigan), also has recognized dentistry as essential to public health, and many other cities of the middle west.

In the far west, Denver (Colorado), and San Francisco and Los Angeles (California), have established free dental clinics, but this work is not as yet paid out of public funds.

Benevolent Institutions of all kinds, in many of the cities in this country, are establishing free dental clinics for the poor children of the community, and the matter is being taken up by the municipalities, so that the rapid spread of the work is assured. Up to date, New York State is the only one in which the State Department of Health has taken up this question of mouth hygiene, and made it one of its regular departments.

#### AUSTRO-HUNGARY.

By Dr. EDGAR NEUMANN, Vienna.

In this country of continuous conflicts, both national and confessional, School Dentistry makes but slow progress. Yet, the average percentage of children with carious teeth is nearly 99. We are greatly indebted to the Secretary of the Austrian School Dental Hygienic Society, Dr. Gabriel Wolf, for the impulse he has given to the work in forming the above Society.

Established in March, 1911, this Society succeeded in November, 1911, in opening the first Vienna School Dental Clinic.

The dental surgeon, Dr. Kreisling, devotes six hours a week to it at a remuneration of £75 per year. A woman attendant and the school nurse have been appointed.

The cost of equipment and working per month is estimated at  $\mathcal{L}_{II}$ .

				s.		
Remuneration to the	dental surgeon		6	5	0	
,, ,,	woman attendan	t	I	5	0	
"	school nurse		ĭ	5	0	
Laundry incidentals	•••	•••	2	5	0	
			£11	0	0	

The Red Cross Society gave a pavilion which was mounted in the garden of the primary school in Hütteldorf (XIIIth district of Vienna). The chair was given by Messrs. C. Ash, Sons & Co., Ltd.

During the period from November 3rd, 1911 to March 1st, 1912, 108 children were examined, out of whom only two were free from caries; the teeth of the remaining children were to a greater or lesser extent defective.

Lower Austria. Among the towns of Lower Austria, Berndorf has done the most important and beneficent work in this department. Ever since 1909, there has existed a School Dental Clinic, completely furnished and equipped for the dental treatment of 1,200 children. Two dental surgeons have been appointed. Lower Austria has thus two School Dental Clinics.

I understand that, in the course of this month, two Dental Clinics will be established in the Orphan Institutes at Vienna and Judenau. Other Clinics will be opened in the XIVth, IInd, VIIth and XIIth districts of Vienna, at Liesing, Purkersdorf, Neulengbach and Baden.

UPPER AUSTRIA. There is no School Dental Clinic in Upper Austria; only in the Real (Council) School of Linz,

private dental surgeons are invited to examine the teeth of the scholars.

STYRIA. In the municipal schools of Graz, poor children are provided with tooth brushes and powder.

In the districts of Fuerstenfeld and Gleisdorf School Dental Treatment is obligatory, for which two dentists are appointed at a salary of £45 each per annum.

GALICIA. Lemberg appointed in 1907 a dentist for examining and treating the teeth of the children. Biala has a school dentist for the primary school.

BOHEMIA. Prague has appointed six school dentists at a salary of £20 each.

In the other provinces of Austria and in Hungary there are some medical inspectors but no school dentists.

#### BELGIUM.

# By M. MAURICE BON.

In Belgium there are few school dental services; i.e., a dental service with a Clinic.

Brussels has a complete dental service, which was established in March, 1877, by the late Mr. H. Bôn. The school population of the capital is 12,000 children, divided into 21 schools. These are visited twice a year, school by school; each child being subjected to a special examination.

On Thursday of each week the children indicated by the dentists attend the Clinic accompanied by a master.

The surgery includes an operating-room and a waiting-room, both being fitted up in accordance with the rules of asepsis and hygiene.

We make as much as possible of dental hygiene as a preventive; and in chatting with the children we urge them to take care of their teeth, especially to clean them every day, and to have the mouth examined twice a year at a fixed date. We demonstrate to them the ravages brought about by dental caries. We explain to them the ill-effects on the general health of a bad set of teeth, and endeavour to convince them that many complaints come from the bad state of the teeth, due to want of proper care.

At the Clinic there are done, especially, a great number of stoppings; also dressings, extractions, and cleanings. On occasion, regulation appliances and artificial dentures are made.

The Clinic is very well attended. Besides the children indicated by the dentists as requiring attention, many others come of their own accord every Thursday to the dental Clinic to receive attention.

This dental Clinic has become a public service, being paid for out of the town budget like all the other branches relative to primary instruction.

The children who attend the schools are subjected to special supervision on the part of their master or mistress. They are obliged to clean their teeth every day with a tooth brush and tooth-powder consisting of camphorated chalk and boracic acid (40/1000).

Schaerbeek, an important commune near Brussels, has also a school dental service and a Clinic, which service is managed by a dentist.

In Antwerp visits are made to the primary schools, and in cases of urgency, as stated in the communal rules, the children are taken to the private house of the practitioner who does extractions and dressings. This somewhat summary organization does not include a Clinic. It must be remarked, also, that it is not managed by a dentist, but by a doctor.

There is the same condition at Liège; visits are made to the schools; no Clinic. A doctor of medicine manages this service. At St. Gilles and Anderlecht there is no Clinic. It is true that the children suffering from toothache are sent to the hospitals.

It would be desirable to establish in all Belgian towns a school dental service together with a Clinic; and especially should lectures be given on dental hygiene to the school principals, masters and mistresses, and to the pupils.

A Committee of dental hygiene is now being formed with a view of taking active steps in order to establish school dental services everywhere.

#### DENMARK.

By M. FRITZ ORTH, Manager of the Frederiksberg Public School Clinic.

It is now nearly 20 years since the idea of the public care of School Children's Teeth was first brought forward in Denmark.\* Several preliminary examinations were performed during those years, showing the same sad fact that Caries was found in 93% of all cases. Preliminary examinations were performed at several places; for instance, Frederiksberg, where from 1900—1909 a Dentist was employed with a fixed salary, who twice every week attended at the different public schools; and in Svendborg, where Dr. M. Kiar from 1896—1906, free of charge, attended the public school children.

During later years, however, the care for School Children's Teeth has come into a better system, due in first instance to the Danish Society for the care of Children's Teeth, which was established on the 25th of January, 1910. This Society has already achieved great work just by appointing a number of local Committees, which again, at several places, have brought about the appointment of

<sup>\*</sup> By Professsor Y. Hoderup, M.D.

School Dentists or the establishing of Clinics, whose outfits the Central Committee, in some cases, has paid.

At present, such clinics are established in the following towns: Esbjerg, Sgórring, Svendborg, Fredericia and Frederiksberg.

At these clinics, where systematic treatment of children is performed, the expenses are paid solely by the respective communes with exception of the last established clinic in Odense, which was started by a private committee and to which the commune pays a fixed amount each year. The salaries paid at the clinics vary of course, but the average salary is kr. 1500 (£93) for 3 hours work on 240 schooldays.

In some towns special school clinics have not been established, but one or more dentists have been engaged to examine the children's teeth at the schools, and attend those children requiring treatment at their private rooms. The towns where such arrangements have taken place are -Hilleród, Slugelse, Nykóbing F, Grenau, Kolding, Nykóbing M, and Aulborg. Two towns, Vyle and Odder, have had a 3 years' trial period with appointed school dentists, but as far as can be ascertained treatment of children from public schools is not now carried on. At Samso, very extensive examinations took place, and in Frederikshavn the public schools issued a circular about the care for children's teeth to the parents. They were informed that tooth brushes could be supplied at the School at moderate prices, also that it was intended to give lectures on "Dental Hygiene."

As mentioned before, local Committees were appointed at several places, and now work at the following towns, Aarhus, Hammel, Hobro, Mariager, Nakskov, Rudlyóbing, Silkeborg, Skanderborg, Vibórg, Vordingborg, Rónne, Maribo and Randers.

All the clinics mentioned and all the school dentists appointed are connected with the public schools and treat the children from those schools. Children from private schools can in special cases be allowed to profit by the public school clinics. No private or college school has

appointed school dentists. During last year some institutions for old people, orphanages and children's homes have had dentists appointed thereto.

The sanatorium for consumptive children at Vyle has its own clinic for dental diseases, managed by the house surgeon.

In Copenhagen, children are 'treated at the Dental School, at the Poli-clinics, and at the new Regs Hospital, where a dentist is leader of the Dental Department. A great deal of work is constantly done; but Copenhagen children would benefit to a much greater extent if school clinics were established, and it looks as if the efforts made for this ideal would be successful.

Together with the care for children's teeth, in most countries there is agitation for also taking care of the soldiers' teeth. In this matter Denmark is ahead, as military dentists are appointed at all garrisons, even if they have not any (military charge) degree in the army.

#### FRANCE.

By Monsieur FRANCIS JEAN, Professor of the Dental School of Paris.

By a decision of March 23rd, 1908, the Minister of Public Instruction organised for the Primary Normal Schools a service of inspection and of dental treatment. The inspection must take place twice a year by a dental specialist, appointed by the Committee of Management. Similar services were at the same time organised in the Boarding Schools connected with the Primary Schools and the Upper Primary Schools. In the case of these schools the pupil is treated outside the school by the dentist chosen by the parents.

In December, 1909, these regulations were extended to all the Lycées and Colleges (Secondary Schools).

In the Primary Day Schools want of funds prevents the Government at present enforcing the same regulations.

A Bill is now before the Chamber of Deputies which will, if passed, give Municipal Councils the option of having the children in these schools inspected by Dental Specialists who will point out to the children the hygienic measures to be taken.

In certain towns of France, for example, at Nice and Dreux, School Dental Clinical Surgeries are subsidized by the Municipal Councils.

In Paris and in the large towns a certain number of Clinical Surgeries have been founded which are supported by the voluntary contributions of the charitable or by Dental Societies or Schools of Dentistry.

Last year, 1911, the "French Association of Dental Hygiene" was founded. Its objects are thus defined:—

- I—To make known the importance of this special branch of hygiene; to show that the proper care of the mouth and teeth is a considerable factor, not only in the preservation of the teeth, but also in the prevention of many diseases; that it is one of the weapons with which to fight tuberculosis; and that the general health of the individual and the development of the race depend upon this hygiene.
- 2—To make all this widely known by lectures, lantern slides, etc., and to put the public on its guard against quackery.
- 3—To organise dental inspection in the schools, army, charitable institutions, etc.

The Association includes a large number of professional Dentists, Members of Parliament, Journalists, Teachers, etc., and is under the patronage of the Minister of Education. Its programme is approved of by the Syndicate of the Surgeon-Dentists of France, the Staff of the Odontotechnique School, etc.

#### SUMMARY FOR SCHOOLS.

Dental treatment is given in School Dispensaries.

Dental inspection and treatment are given in the Normal Primary Schools and the Boarding Establishments in connection with the Primary Schools and the Upper Primary Schools.

Inspection is made in the Lycées and Colleges (Secondary Schools).

A certain number of School Dental Clinical Surgeries have been founded or subsidized by Municipal Councils.

#### GERMANY.

By Dental Surgeon KIENTOPF, Director of the 1st Berlin School Dental Clinic.

The practical carrying out of social care for school children had its first beginnings in Strassburg im Elsass in the year 1902. The Director of the first School Dental Clinic, Professor Dr. Jessen, has by his untiring propaganda at home and abroad succeeded in inducing others to take up his idea for the establishment of places of relief, for improving the buccal condition of poor children. In Germany the propaganda for this branch of social care of the teeth in the Schools is now carried out by the German Central Committee for Dental Care in the Schools (Deutsches Zentralkomitee für Zahnpflege in den Schulen). Its head-quarters are in Berlin. This Committee is not exactly a Dental Union but a Society drawn from all classes of the population which exclusively pursues, in the widest sense, the introduction and furtherance of dental care.

From the statistical material of the Central Committee, which is under the direction of Dr. Konrad Kohn, School

Dentist Kientopf and Dr. E. Schmidt, the following information may be gleaned, in reference to the spread of the practical care of the teeth of school children in Germany:

- 1—Provision in Urban Clinics where practical dental care is exercised by specially appointed Dental Surgeons: Altona, Barmen, Berlin, Bernburg, Bielefeld (General Polyclinic), Bonn, Cassel, Charlottenburg, Colmar, Cöln, Darmstadt, Dortmund, Duisberg, Düren, Düsseldorf, Elberfeld, Erfurt, Essen, Frankfurt a/M, Freiburg i/B, Hamburg, Hannover, Harburg, Heidelberg, Höchst a/M, Karlsruhe, Leipzig, Lüdenscheid, Metz, Mülhausen im Elsass, Nordhausen, Nürnberg, Remscheid, Rostock, Schöneberg near Berlin, Stettin, Strassburg im Elsass, Stuttgart, Ulm, Wilmersdorf near Berlin.
- 2—Dental care exercised in Urban Clinics by Dentists giving part time: Benrath, Cöpenick, Eberswalde, Frankfurt a/Oder, Fürth, Gotha, Gunewald, Hamm, Hildesheim, Iserlohn, Kattowitz, Lahr, Müncheberg i/M, Offenbach a/M, Saarbrücken, Schiltigheim, Stoppenberg, Worms.
- 3-Care in connection with the University Clinics: Greifswald, Halle, Kiel, Marburg, Münster, Würzburg.
- 4—Care exercised at the expense of the Towns by dentists, in part, in their private practice: Annaberg, Altona, Altenessen, Augsburg, Bergisch-Gladbach, Borbeck, Cottbus, Dockenhuden, Dessau, Diedenhofen, Elmshorm, Eupen, Freiburg in Schlesien, Friedenau, Fürstenberg i/M, Giessen, M. Gladbach, Glogau, Görlitz, Göttingen, Haspe i/W, Holzminden, Itzehoe, Konitz, Konstanz, Kreuznach, Lennep, Kreis Linden-Hannover, Löhejun, Lütgendortmund, Mannheim, Memmingen, Mühlheim a/R, Meiningen, Markirch, Myslowitz, Neubrandenburg, Neukölln, Neustadt, Niederschönhausen near Berlin, Niederzier und Oberzier, Oberschönweide, Kreis Ost-Havelland, Pankow near Berlin, Pillkallen, Kreis Ratingen, Rheydt, Roth a/S, Saalfeld, Schmargendorf, Siemianowitz, St. Blasien, Steglitz near Berlin, Tharandt, Waldenburg i/ Schl., Wanne, Warnemünde, Werden a/R, Wernigerode, Wiesbaden, Wickrath, Zülpich.

The School Deputation or the Section for Social care is the local organization appointed to undertake the establishment and government of such a School Dental Clinic. Local dentists would give their counsel in this connection. If a place or district intends to introduce this Care it is necessary to awaken the interest of the parents in the work by means of suitable articles in the papers, lectures with limelight pictures, etc. Furthermore, teachers, the administrators of local sick funds, and large firms must be interested in the establishment of Dental Clinics. has already been mentioned there are various ways of introducing this Dental supervision. Some cities appoint local dentists for carrying out this attention to the teeth, who for a fixed sum, or by payment for individual work (as for instance at Mannheim) undertake the work in their private practice. Others again, arrange for this Care of the teeth in Clinics which are established and maintained by the Town Authorities. A Town which desires to introduce School Dental Care, but is not in a position to appoint a dentist specially for this treatment can proceed by other ways. Local dentists can be engaged to do the work of the Clinic by the hour (as for instance at Fürth and Eberswalde). Where a large Clinic demands much time, an older dentist would undertake its management (as for instance at Darmstadt and Nordhausen) and arrange for an assistant to work under his superintendence. Again, the Clinic might develop into an Institution to which dentists could be appointed and make it their sole work, as is the case in by far the greatest proportion of the Clinics which are now at work (see under 1). Some university towns combine their place of aid suitably with the dental section of the university, and entrust the latter with the treatment of its school children (see under 3).

In regard to the cost it would probably represent an outlay of about 2,000 to 3,000 Marks (£100 to £150) for a modern installation per chair to work the Clinic. The payment of the dentist who adds such treatment to his private practice would be calculated according to the number of children dealt with and the work which was done. Specially appointed dentists would receive a higher rate of remuneration than others, in the same way as head teachers or

directors of large Clinics. The whole budget of a Clinic would have to be arranged in such a way that for every child there would be at least one Mark per year available. The town would have to bear the expenses either from its own funds (as for instance at Schöneberg) or perhaps by definite contributions of about one Mark per year for each child, and also by contributions from the parents who consented to and would pay for the treatment of their children (as for example at Duisburg). Others, again, would raise money, where there is no indigence, by making individual charges for fillings (as for instance in Berlin). National insurance societies, sick funds, large works, etc., should also be applied to for the raising of funds. One town in the Rhenish provinces has a budget for its 12,000 children, as follows:

Contribution of the Local Sick Fund 6,000 Marks (£300).

- ,, ,, Parents ,, 4,400 ,, (£220).
- ,, ,, Town ,, 1,400 ,, (£70).

From the preceding, it will be seen that by utilizing local conditions the carrying out of orderly School Dental Care, at not too great a cost, may be brought within the reach of every town.

#### ITALY.

By Dr. G. COEN-CAGLI.

In Italy we have just begun to think of the teeth of the children of Public Elementary Schools.

The Dental Inspection of children in the Schools of Milan, Turin, Genoa, Leghorn, Padua, Bologna, Rome and some other cities has proved that nearly 90% of children need dental treatment.

This treatment is now partially enacted in Milan, Genoa, Turin, and Bologna, supported either by the Municipality or by Benevolent Institutions, but there are not yet in Italy true School Dental Clinics.

#### RUSSIA.

By Mr. L. WALTHER, Moscow.

The examination of the teeth in the Russian middle schools (gymnasiums, colleges and commercial schools) is conducted nearly everywhere; and is also introduced in the Institutes, which are supported by the Ministry of War, for instance in the cadet and all military schools. the latter there are already complete dental surgeries, where the treatment of the teeth takes place systematically. Not much has been done with regard to the primary and public schools generally; although there exist small dental surgeries in the secondary schools in St. Petersburg where aid is rendered to the children. These places, however, are not sufficiently worked out yet and are still in a provisory state. A special agricultural school in Petersburg has also a dental surgery; likewise the teacher-seminaries, which, however, apply only to adults. Russia is well aware that the teeth require great attention from the earliest childhood. Nevertheless, in that great empire school dentistry is not as far advanced as it is abroad; still, it is

considered necessary to conform to the progress made by and going on in other countries.

In Moscow there are special dentists in all greater gymnasiums and institutes, whom the children may consult either at the dentists' offices or in a schoolroom, where they are examined by an assistant.

In Odessa there is a special polyclinic, where teeth are being treated.

CHARKOFF has a special children's clinic, which is supported by the Charkoff Odontologic Society. Much the same is found in all Russian University and Government places.

FINLAND.—In the year 1910, a society was established under the name of *The Universal Society of Protectors of the Hygiene of the Teeth*, with the same purposes as similar societies in other countries. Long before this took place, however, owing to the efforts of several professional men (for instance Mr. Axel Aspelund, of the Finnish Dental Society, Mr. Gösta Hahl, Professor Matti Ayräpäa and others) a special committee was founded, in which the above named took the most lively interest. Under the co-operation of those gentlemen and a certain Mr. Weber, a Dental Polyclinic was created in Helsingfors, and the following figures give a view of the work done by the undertaking:

1907-1908 — 4,558 patients. 1908-1909 ... 7,398 ,, 1909-1910 ... 16,791 ,,

The hospital is now supported by the municipality and, as might be observed from the above figures, increases considerably year by year. Besides Helsingfors, Abo, Tammerfors and Wiborg, are noted down for the erection of dental clinics. In these hospitals, of course, in the first place, children are to receive help and attention.

#### SPAIN.

#### By Dr. LANDETE, Madrid.

School Dentistry in Spain is in a relatively backward condition. That is so, not only because the authorities neglect the methods or are unacquainted with them, but also because the dentists do not care much for teaching or making known what dentistry includes in all its public manifestations.

Only two towns have organized dental inspection in schools.

MADRID.—One year ago, a company of medical practitioners was entrusted with the inspection of school children. All the specialties are included; and Stomatology has been committed to Dr. Landete.

The dentist, in conducting his inspection, is provided with a mouth-mirror, pliers, antiseptics and charts. These charts are of various colours for boys, girls or infants. They are kept at the "Medical Inspection" Office, situated for the present at Grupo Bailen. As a central office has not proved practical, the Municipality granted a credit of 1000 pesetas (£40) to establish a little dental office in a school. And so in a few months, the Aguirre School will be thus provided.

There is now great enthusiasm, and what will not be done officially will be done by private initiative. Although the posts are not paid for, it will very likely be necessary to do so eventually.

BARCELONE has ten dentists who are paid 100 pesetas (£4) a year for inspection and treatment of the district school children. The children are treated at the dentists' offices.

As it may be seen from the above account, the dental art for schools is still in embryo, since the first clinic has been inaugurated only in a few months. However, there is every prospect that, at no distant time, the public dental art will be more honoured in Spain. With the new Odontologists, we shall see well trained professional men, wishing to take a public and private part in the extension of such a humanitarian and useful institution.

#### SWEDEN.

#### By M. ALBIN LENHARDTSON,

Director of the School Dental Clinics in Stockholm, and President of the Hygienic Commission of the Swedish Dental Association.

The interest of the public in the hygiene of the mouth is very great in Sweden. Our population is five and a half millions, and we have Dental Clinics in about forty schools The Press is very willing to publish articles on the treatment of the teeth of school children. Our Government is going to appoint a Royal Commission to enquire into the whole question. The Swedish National Federation for promoting the hygiene of the mouth, which has sub-branches in several provinces, has already done a great deal of work, and, in conjunction with the Swedish Dental Association, has induced the Government to make the whole movement a national question. As the result of a proposal by the Swedish Dental Association to the Royal Government Board, Parliament has this year voted a sum towards the expense of examining the teeth of the children in all our Swedish High Schools.

The Swedish Association for the delivery of Popular Lectures, which has a yearly Government grant of £20,000, has appointed me lecturer on the hygiene of the mouth, and up to date I have given 160 lectures in various parts of the country.

The Odontological Society of Stockholm has presented two illustrated statistical charts to the Permanent Social Exhibition in Stockholm, which should attract the attention of visitors and lead them to take an interest in the care of the teeth of school children.

Complete treatment was introduced during 1911 in the schools in Gothenburg, and we have two Dental Clinics in Stockholm, the oldest of which was established in 1907. The experience gained from these Clinics is so impressive

that the municipality has decided to extend conservative treatment successively to all the children in the Board Schools.

At the yearly meetings which are held of the parents and Board School children, the school dentists have an opportunity of speaking both to the children and the parents, and these occasions have proved of practical benefit to all concerned.

In conclusion, I must say that I heartily agree with the proposal made by Mr. Geo. Thomson, of London, that the school dentists of Sweden, in common with all the dental practitioners of other countries who are engaged in public work, should combine to come together in connection with the meeting of the Federation Dentaire Internationale, in London, in 1914, for the purpose of freely discussing and deciding many points of great value to the public relating to the hygiene of the mouth.

# ORAL SEPSIS.

Oral Sepsis, or septic infection of the mouth, is very common among school children. For the most part it is due to the presence of carious teeth or their diseased roots.

In the notes, 2 and 3 on Dental Caries, pages 111-112, which explain a portion of Chart 2, it has been stated that the destruction of the teeth is due to the action of bacteria; and, further, that this destruction of tooth tissue is followed by decomposition and putrefaction of the pulp, which consists of nerves and blood vessels and other soft structures.

The presence of this septic or poisonous material is a constant source of danger. When forced by mastication or other influences into the tissues of the jaw, it causes acute inflammation, with the formation of an abscess and a high temperature.

- a.—In temporary teeth the pus generally escapes by the side of the tooth and into the mouth.
- b.—In permanent teeth—generally a six year molar—owing to the deeper implantation of roots the pus may make a way through the jaw bone and appear on the face or under the mandible or lower jaw. With the escape of matter the acute symptons subside. The relief, however, is but transient (unless the tooth is removed) for the results may be in many ways disastrous to the well being of the child.

Local effects. The mucous membrane of the cheek or the gums may become infected and varying forms of stomatitis ensue.

The glands in the neck may be infected; and, later, such glands may become tubercular. The tonsils may become infected and an active or passive enlargement may seriously interfere with respiration.

Infection of the middle ear through the Eustachian tube may lead to acute, followed by chronic, otorrhoea. The naso-pharynx may become infected, &c., &c.

Constitutional effects. Apart from these local infections, is the fact that the escape of poisonous material into the tissues may result in a general infection, with blood poisoning—septicaemia, pyaemia—followed by death.

When churned up with the food and constantly swallowed, these products of decomposition become absorbed into the general system producing a slow form of toxic poisoning, which, in addition to the effects on the general system, as shown by various symptoms, such as fever, nausea, nervous irritability, indigestion and anæmia, lowers the vitality of the body and renders it susceptible to other diseases.

When examining the mouth of an apparently healthy scholar, no surer sign of oral sepsis can be found than the oozing of pus from the soft tissues which surround carious teeth or their necrotic remains.

"There is strong reason to suspect and even to believe that many of the diseases of the nervous system, diseases of the respiratory organs, diseases of the alimentary canal may be due, in some cases directly in others indirectly, to the fact that the masticatory organs have been neglected. Carious teeth, besides causing nervous irritation, may prove the starting point of putrefactive and its allied processes, and acting as an infective focus materially influence diseases of the respiratory organs and of the alimentary canal; and, apart from loss of function, they may produce general malaise, followed by malnutrition, thus paving the way for diseases which often seem to lie in wait until a favourable opportunity is afforded of exercising a malign influence on their youthful victims."—Diseases of Children's Teeth, pp. 178 and 179. R. Denison Pedley.

# THE PREVENTION OF DENTAL DISEASE.

The prevention of dental disease is worthy of consideration by all who have the welfare of children at heart, and who desire to maintain a strong and vigorous race.

The destruction of the teeth is due to dental caries, the most prevalent of all diseases among civilized communities.

The effects of dental caries have been shown in Chart 2. Some effects upon the body have been described in Oral Sepsis.

What is the principal cause of dental caries?

The function of the Teeth is mastication, or the grinding of food, so that it may be acted upon by a copious supply of saliva and its digestive ferment ptyalin. Digestion thus commences in the mouth and the prepared food is passed on to the stomach for complete digestion.

From the resources of an advanced civilization the people have been and are supplied with soft foods—foods which require little or no mastication. In consequence the jaws suffer, the teeth decay and the saliva no longer protects the teeth from the action of bacteria—micro-organisms—and their products

The change is chiefly seen in our national food, bread.

The coarse wholemeal flour has been replaced by a bleached flour, ground by steel mills into a superfine powder and entirely deprived of its fibrous elements. When made into bread it requires little mastication, the fibrous material so efficient a cleanser is no longer present and small masses cling to the surfaces of the teeth to form material for bacteria to act upon.

Dr. Keith writes as follows:—"We may draw one conclusion with the utmost certainty from the comparison of ancient and modern teeth—that the ancient and modern dietaries were totally different in nature. The old required vigorous mastication: the modern does not.

We may also infer that the disturbance so widely affecting our teeth, jaws, nose and face is a consequence of that change in dietary."—The Human Body, pp. 234.

Three main lines of defensive action are necessary to prevent the inroads of dental caries.

- 1. A Proper Diet, with Efficient Mastication.
- 2. Constant Cleanliness.
- 3. The Early Treatment of Decay and Subsequent Systematic Supervision: hence the necessity of School Dental Clinics.

The following extracts, which briefly treat with these matters, are taken from authoritative sources.

### I. DIET IN RELATION TO DENTAL DISEASE.

"The practical prevention of dental caries is, so far as our knowledge goes, broadly a question (a) of diet, both during infancy and childhood, and (b) of cleanliness of the teeth.

"There are few questions of greater moment calling for the attention of the Health and Education Authorities of this country than this one of diet, both in relation to teeth and to the general nutrition of the child. The problem concerns both the most suitable forms of food and the best methods of feeding at the different periods of life. A suitable and sufficient diet is one of the most pressing requirements in relation to the national health. Much may be effected in this direction through the instruction and guidance of mothers by means of health agencies, but an important factor is the training of the children in the Elementary and Secondary Schools.

"In this connection I may appropriately quote, with permission, the following statement on children's diet in relation to dental disease prepared by Mr. Norman Bennett, the Hon. Sec. of the British Dental Association.—

'A great amount of dental caries in children might be prevented by more rational methods of feeding from eighteen months onwards. The custom, so widely

prevalent, of giving children up to five and six years of age nothing but soft and pappy food-bread and milk, bread puddings, finely-minced meat, and mashed or pounded vegetables—is responsible for a vast amount of caries. A child of 2½ years of age with a full deciduous dentition is equipped with a masticating apparatus at least as efficient in proportion to his size and weight as that of an adult, and it is only by vigorous use of the teeth on the kind of food that requires chewing that they are kept clean and func-The eruption of the first molars at about fifteen months is an indication that solid food should soon be given, and the milk diet reduced. A healthy child of eighteen months should be eating bread and butter, potatoes (broken but not mashed), toast, biscuits, fish, and, as soon as he has acquired the habit of mastication, also meat. The important point is that meat should not be minced so as to encourage bolting, but only cut up into thin flat pieces of suitable size. Bread made from flour containing the fibrous inner husk of the wheat is better than white bread; coarse brown bread may be too irritating.

'At three years of age a child's diet should consist of all ordinary wholesome food stuffs (including vegetables, suet puddings, &c.) properly cooked, but given as far as possible in a solid form and separately, instead of all mashed up together in a way so commonly practised. Fruits, especially good ripe apples, at the conclusion of a meal help to clean the teeth. The craving for sugar is natural in a child, but sweets and starchy foods, e.g., biscuits, should not be given just before bedtime. All stimulants (i.e., alcohol, tea and coffee), prepared soups, sauces, and gravies, preserved meats and savouries, should be avoided.

'It has been proved that children fed in this way on rational lines remain almost, if not quite, free from caries, and that the deciduous teeth are succeeded by the permanent teeth in a normal and orderly manner. Furthermore, the growth of the jaws is stimulated by use, and fermentation in the stomach reduced or obviated by the trituration and insalivation of the food.'

"It is important that the influence of diet in respect to dental disease should be appreciated to the full in order that in the consideration by an Education Authority of the methods of prevention to be adopted the emphasis may be laid in the right place. There is no sufficient reason to believe that the use of the toothbrush even if adopted from an early age would suffice, in itself, to prevent the development of dental caries. In practice, questions of dietary and conservative dentistry are also involved."—Annual Report for 1910 of the Chief Medical Officer of the Board of Education, pp. 172-3.

"The habit of giving bread or other starchy food to a child when in bed at night should be entirely prohibited. Many believe that sugar injures the teeth by inducing caries, and therefore sweets are debarred. It may be well to remind the reader that the ferment of saliva, known as ptyaline, converts starch into sugar. This sugar is acted upon by the bacteria of the mouth, producing lactic acid. Miller states in his Micro-organisms of the Mouth, pp. 207.—'I consider starch and amylaceous substances more detrimental to the teeth than sugar, particularly as sugar, being readily soluble, is soon carried away or so diluted with the saliva as to be rendered harmless, whereas amylaceous matter adheres to the teeth for a greater length of time, and consequently manifests a more continued action than sugar.'

"This statement accords with our experience, especially among the poor in the Hospital, where children of two and three years of age are found with scarcely a sound tooth, and the teeth, or what remains of them, coated with the remnants of bread or biscuits. This material nearly always gives an acid reaction when tested with litmus paper.

"To deprive children of wholesome sweets at suitable times in order to preserve their teeth is a mistaken idea. It also deprives them of nourishment, for it is well known that sugar is an important food."—The Hygiene of the Mouth, by R. Denison Pedley.

### 2. THE USE OF THE TOOTH BRUSH.

"The teeth must be cleansed all over. The labial surfaces are to brushed not only from side to side, but up and down, *i.e.*, the motion should be vertical as well as horizontal, in order that food may be removed from between the teeth......

"Cleansing the mouth should be performed with the same regularity with which the child has a daily bath and washing of the face and hands.

"Especially is the tooth toilet necessary after the last meal of the day, because more mischief is done in the night, while the tongue and jaws are at rest, than at any other period. This is an obvious fact, notwithstanding the popular impression that a brush round in the morning is all that is necessary, even among those who are in the habit of cleansing the teeth."—The Hygiene of the Mouth, by R. Denison Pedley.

### 3. THE TREATMENT OF DENTAL DISEASE.

"Probably in no form of disease is treatment in the earliest stages more necessary or attended with more satisfactory results. Indeed, it is hardly too much to say that given such treatment the arrest of the disease can be assured, and the many and far-reaching ill effects, in so far as they depend upon dental disease, and not also upon other adverse causes acting in conjunction, can be entirely prevented from development. In no disease, then, is it more imperative to view the actual treatment from the point of view of prevention. Treatment must begin from the first moment disease shows itself, and indeed before it shows itself. The recognition of this fact is of the utmost importance to Local Education Authorities when they come to consider what practical measures of a direct kind they should adopt in order to remedy the serious state of affairs as revealed by Medical Inspection. It suggests at once certain practical lines of action which are of almost universal application, and which if followed will inevitably lead to the desired end.

"First, in order to search out dental disease in its earlier beginnings the inspection of the teeth of the children should preferably be carried out by a dentist.

"Secondly, the inspection should begin at latest from the earliest age at which the first of the permanent set of teeth begin to erupt. That is to say, the inspection of the children's mouths should begin not later than during the sixth year of age. Even at the age of five, caries may be present. In practice probably the simplest and most satisfactory proceeding for the dentist is to inspect the mouths of all the children in the infants' school. Any attention urgently required in respect of the temporary teeth can then be given and disease, in its earliest stages, of the newly developed permanent set can be treated by fillings.

"Thirdly, the re-inspection of children once treated should take place at intervals of not more than one year. It is of rare occurrence for a tooth passed as 'sound' at one inspection to become decayed to such an extent as to be classed as 'unsavable' at the end of a year."--Annual Report for 1910 of the Chief Medical Officer of the Board of Education, pp. 175.

### NATIONAL INSURANCE ACT, 1911.

At the time of publication of this Edition the provisions of the National Insurance Act, 1911, do not apply to those under the age of 16 years. But, whatever course may be decided upon in the future as to dental treatment of the "Insured" (at present not really provided for) it seems clear that in proportion to the extent to which the young are cared for dentally they will not require to make the same demands for medical benefits which the "next generation" would otherwise do.

Again, owing to the defective teeth of many of the patients now being treated in the Sanatoria, it appears that Dental Surgeons should be appointed to these institutions, otherwise a great opportunity for the furtherance of the cure or alleviation of their primary condition may be lost.

# S.D.S. DENTAL HYGIENE CHARTS.

Published for The School Dentists' Society by Messrs. W. & A. K. Johnston, Ltd., 2 St. Andrew Square, Edinburgh; 7 Paternoster Square, London, E.C. Copies may be obtained direct from the Publishers, or any Dental Depôt.

The Three Charts in this series, of which greatly reduced reproductions are presented with this booklet, have been prepared with the view of enabling Teachers and others to bring this most important subject of Dental Hygiene in the clearest and simplest form before Pupils and Students.

The illustrations have been prepared with the greatest care, carefully drawn, lithographed and coloured; and, being on a large scale, are in every way suitable for Lecturing and Teaching purposes.

Each chart measures 54 by 38 inches, and is mounted on cloth and rollers, and varnished; the price is 12/- For the set of three charts the price is 30/- A facsimile reduction, with notes, on paper 20 by 10 inches is given gratis with each chart. Additional copies of the reductions are supplied at 6d. each, or in sets of three put up in strong manilla envelope at 1/6.

The notes supplied with charts are reprinted below.

# CHART No. 1. ELEMENTARY.

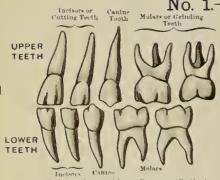
I. The temporary or milk teeth of children commence to appear about 7 months after birth, and their number is complete at about  $2\frac{1}{2}$  years of age. During the first 7 months of life the proper food for a child is milk. Neither meat, bread, biscuits, nor patent food should be given in any shape or form before 7 months has been reached, as the necessary digestive organs have not yet developed; ignorance of this fact is responsible in many cases for the well-known pitted or honey-combed appearance of the permanent teeth.



# "S. D. S." DENTAL-HYCIENE CHARTS

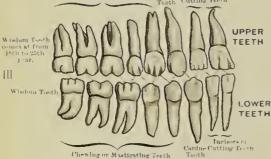
ISSUED BY

THE SCHOOL DENTISTS' SOCIETY.



Slib View of Upper and Lower Temporary Teeth of Left Side, these begin to appear at six months and are complete at two and a half years.

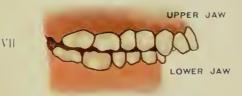
Chewling or Masticating Teeth Canine Inclsors or Tooth Cutting Teeth



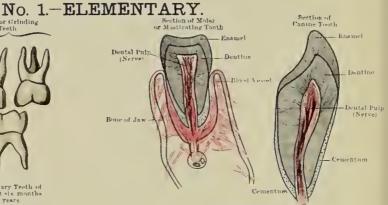
Side View of Upper and Lower Permanent Teeth of Right Side, it use begin to appear at 6 years of age and are complete at 12 with the exception of the Wisdom Teeth which appear at from 1626 years



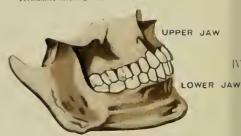
Showing Natural Crevices on healthy Rock Lock in which food collects and so leads to the ay and formation of cavities (A Bienspid has at some time been extracted on the right side, and Nature has filled the Gap.)



Slide View of Sec. nd Set of Upper and Liwer Teeth, shawing how the front Upper Teeth may project, as the result of Thumle strking, the use of the Rulose Test, or Comforter



The Drawing on the Right shows structure of a Front Incisor or Cutting Tooth , that on the Left of a Permanent Grinding or Molar Too.



tireffinary localthy Second Set of Teeth, showing how the Lower At Into the Upper Teeth



Showing Front Teeth and places between Teeth where food his collected and led to decay



VI

Front View of Upper and Lower Second Toeth, showing how the Treth do not meet in front as the result of Thumb sucking, the use of Bulder Text, or Comforter

- II. The main bulk of a tooth is composed of dentine, the exposed part of which is covered with enamel in order to withstand the wear and tear of mastication. The interior of a tooth is occupied by the dental pulp or nerve, as it is commonly called; it is composed of minute nerves and blood-vessels, and it is owing to the irritation and inflammation of this pulp or nerve that we get toothache when a tooth is decaying.
- III. The first permanent teeth to appear are the four molars, one upper and one lower on each side; they appear immediately behind the (hindmost) temporary molars. These permanent 1st molars are of the utmost importance to the individual, and every effort should be made to keep them clean, and consequently free from decay. The remaining permanent teeth continue to appear in groups till 18 to 25 years of age, the last being the so-called wisdom teeth or 3rd molars. It is important to realise that the site of the temporary molars is in the permanent set occupied by teeth called from their shape bicuspids.
- IV. This is a side view of a normal healthy set of permanent teeth. It is important to notice that the upper front teeth overlap the lower front teeth, that the upper and lower teeth articulate or fit into one another, and that most of the upper teeth are opposed by two lower teeth.
- V. This diagram shows the fissures or crevices which ordinarily exist on the surfaces of the dental enamel. It is in these recesses that starchy foods, such as bread, cake, biscuits, and such like are apt to remain and undergo fermentation, leading to the formation of acid products which dissolve the mineral matter (calcium salts) from the teeth, rendering them soft and open to the attack of the micro-organisms which bring about dental decay. It follows, therefore, that one of the most important items in the prevention of dental decay is cleanliness of the teeth, and in bringing this about it is essential that the whole exposed surface of each tooth should be kept free from the accumulation of food remains.
- VI. This front view of the upper incisor and canine teeth shows where food of the same description as mentioned in Fig. V. is apt to collect, and emphasizes the importance of cleaning the spaces between as well as the exposed surfaces of the teeth.
- N.B.—Precipitated chalk is a cheap and reliable tooth powder, and can be readily obtained at any chemist's, and should be used night and morning.
- VII. This is a side view of the deformity of projecting upper front teeth. It is associated with nasal obstruction, especially in the form of adenoid growths (adenoids), and is also produced by thumb-sucking in childhood, and the use of the rubber teat or "comforter." Owing to inability to breathe through the nose, and in addition to the hideous deformity here

shown, the victim of this condition is compelled to breathe through his mouth, and is thus deprived of the warming and filtering apparatus provided by nature, namely, the mucous membrane which lines the interior of the nose.

VIII. This diagram shows the condition known as open bite, in which the front teeth do not meet. It is usually caused by the habit of thumb-sucking, which is not uncommon amongst young children, and also by the use of so-called rubber teats or "comforters." This deformity is often associated with the condition known as mouth-breathing, in which there is an inability to breathe through the nose owing to obstruction of the air-way.

# CHART No. 2. THE DENTAL NERVES

The Chart explains pain occurring in connection with the teeth (toothache) and pain occurring in connection with the nerves (neuralgia).

Pain felt through the Brain.—The brain is the centre of intelligence, and there all feeling and sensation are recorded, and thence all impulses proceed. Injury to other parts of the body causes the nerves to send special messages to the brain by which we realise the sensation of pain.

A Telegraph System.—We may liken the body to a country covered with a network of telegraph wires (nerves) radiating from the central capital (the brain) to receiving offices (nerve terminals) all over the country.

Dental Nerves.—The teeth are supplied by branches of the 5th or trifacial pair of nerves.

Leaving the brain, the nerve enlarges to form the Gasserian ganglion, and then divides into three trunks. The first (ophthalmic) supplies tissues around the eyeball, forehead and part of nose; the second (superior maxillary) supplies the upper jaw and teeth and the face; the third (inferior maxillary) the lower jaw, teeth, tongue, chin and region in front of the ear.

Note.—Each tooth has its separate nerve entering through a hole at the end of each root and terminating in the pulp.

Neuralgia and Toothache.—Facial neuralgia, or pain through the course of the trifacial nerve, may be due to ill health, presence of tumours or swelling, disease of the nerve or undue pressure, etc. Much more commonly it is due to trouble in or about the teeth, and can be quickly cured.

In all cases of neuralgia the teeth should be most carefully examined.

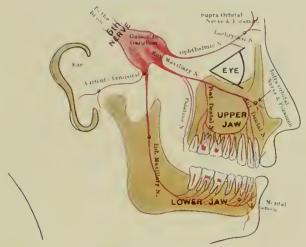
# "S.D.S." DENTAL-HYCIENE CHARTS

No. 2

THE SCHOOL DENTISTS' SOCIETY.

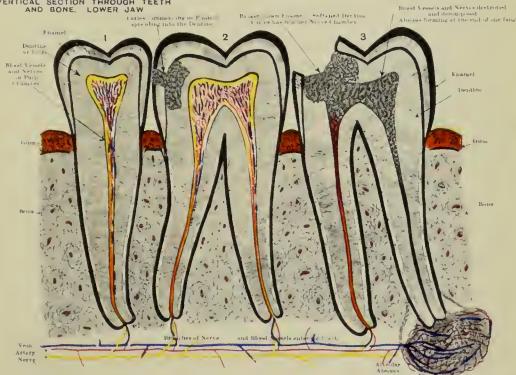
No. 2

THE DENTAL NERVES.



### DENTAL CARIES.

VERTICAL SECTION THROUGH TEETH AND BONE. LOWER JAW





Pain caused by injury to the branches or along the course of a nerve is often "felt" at places where it goes through the bone.

"Toothache" is thus often felt below the eye, at the infraorbital foramen; in the chin, at the mental foramen; or by the ear, where the auriculo-temporal nerve emerges.

Pain caused by the upper teeth may often be referred to the lower, and *vice versâ*.

Pain caused on the right side is never referred to the left as the nerves are quite separate.

### DENTAL CARIES.

The Chart shows a vertical section through three masticating teeth of the lower jaw and the bone. A bicuspid tooth and two molar teeth.

Although these teeth differ in shape they are of similar structure, and have in common:—

- (a) A crown: that portion of the tooth above the gum.
- (b) A root, or roots: that portion of the tooth in the bone of the jaw.
- (c) The pulp, for the supply of sensation and nourishment.
- 1. The crown is covered with a dense layer of enamel, the hardest structure in the human body. It extends only to the neck of the tooth, where it meets the cementum of the root. Beneath the enamel is the dentine or ivory, somewhat softer than the enamel, forming the bulk of the tooth, and entirely surrounding the pulp or nerve chamber except at the termination of the root. A thin layer of cementum covers the dentine below the gum. The central pulp is all that remains of the formative organ of the tooth. It consists of a bundle of nerve fibres embedded in connective tissue and blood vessels. Its surface is covered with a layer of cells, the ends of which pass through the fine tubes in the dentine.
- 2. This shows the commencement of caries or decay. Teeth are composed of lime salts and gelatine. Food left on or between the teeth is attacked by germs (bacteria). Fermentation with the production of an acid is the result, and the lime at one spot in the enamel is dissolved away. Fresh bacteria dissolve the gelatine and decay is on its way to the pulp. Sometimes there is pain, sometimes there is not, before the pulp is reached. If the decayed portion of the tooth is now removed and a proper filling put in, the tooth may last for years and be practically sound again.

3. Here the decay has reached the pulp cavity. After a period of great pain the pulp dies owing to pressure of the blood. Death is followed by decomposition and putrefaction of nerves and blood vessels. The material becomes septic or poisonous. The pressure of food squeezed into the tooth during mastication forces this poisonous material through the root of the tooth. Acute inflammation follows, and an abscess accompanied by much pain and swelling is the result.

### CHART No. 3.

# TEETH OF A CHILD BETWEEN SIX AND SEVEN YEARS OLD.

The Chart shows the temporary or "milk" teeth in position in the upper and lower jaws on the left side. The outer surface of the bone has been removed in places so as to show the roots of the temporary teeth and the amount of development of the permanent teeth between 6 and 7 years. The relationship of the developing permanent teeth to the temporary teeth is also shown. The formation of teeth commences at a very early period in the development of the body, and at birth a good deal of hardening (calcification) has already taken place. Even a part of the crown of the first permanent molar is present at birth, although it will not come through the gum (erupt) until 6 or 7 years later. crown of a tooth (which is the part exposed above the gum) is covered with a protective coating of enamel, the hardest tissue in the body. Enamel is composed of lime salts, and the other parts of the tooth also contain a large proportion of carbonate and phosphate of lime. It is therefore important that the food of young persons should contain sufficient quantity of these salts, in order that good bones and teeth may be properly formed. The twenty temporary teeth "cut" through the gums in successive groups, commencing during the first year of life, and should, normally, be all in position at 3 years of age. The following table gives the approximate ages at which they appear --

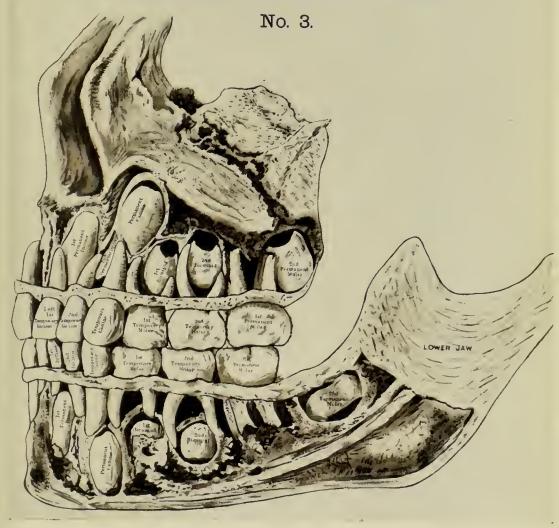
Lower central incisors	•••	6 to	7	months
Upper central incisors		7 to	9	,,
Lateral incisors	•••	9 to	10	"
First temporary molars	•••		I 2	,,
Temporary canines	* * *		18	"
Second temporary molars			24	,,

Each member of the series of temporary teeth is succeeded by its corresponding member of the permanent dentition. The "shedding" of the temporary teeth also occurs in groups, and in the same order in which they erupted. The roots waste

# "S. D. S." DENTAL-HYCIENE CHARTS

ISSUED BY

THE SCHOOL DENTISTS' SOCIETY.



TEETH OF A CHILD BETWEEN SIX AND SEVEN YEARS OLD. BONE REMOVED TO SHOW SECOND SET FORMING IN THE JAWS.



away, and finally the crowns, unless previously lost by decay, become loose and fall out. Meanwhile the permanent teeth, as shown in the Chart, have been gradually developing in the jaws, and the crowns soon occupy the places left by the shedding of the temporary teeth, the roots being gradually finished during the next two years. The following table gives the approximate dates of the eruption of the successors to the temporary teeth:—

Lower permanent cen	tral ii	ncisors	• • •	7 y	rears
Upper permanent cen	tral ii	icisors		8	,,
Lateral incisors				9	,,
First bicuspids				10	71
Second bicuspids	• • •		0 0-1	I I	,,
Canines				12	,,

In addition to these "permanent" teeth, three molars above and below on each side come up at the back, behind those previously mentioned. They do not take the places of temporary teeth, but room is provided for them by increased development of bone at the back of the jaws. The first permanent molar may be expected between the ages of 6 and 7 years, and as it has no predecessor and is erupted whilst the temporary molars are still present, it is, unfortunately, too frequently regarded as belonging to the temporary dentition and allowed to decay. It is, however, the most important of the molar series in mastication, and is also of great service in preserving the natural shape of the jaws. The second permanent molars generally erupt between the twelfth and thirteenth year. The third molar, or "wisdom," teeth are more variable, and may erupt between 17 and 25 years, or later.

# LANTERN SLIDES TO ILLUSTRATE POPULAR LECTURES ON DENTAL HYGIENE.

A series of eleven lantern slides, in colours, have been made from the three charts shewn in this book, and can be obtained from Messrs. Claudius Ash, Sons, & Co., Ltd., 5 to 12 Broad Street, Golden Square, London, W., and the Dental Manufacturing Co., Ltd., Alston House, Newman Street, London, W. These slides have been prepared by the Paget Colour Process Duplicating Method, whereby the colours shewn on the charts are reproduced. Price: 2/6 each slide. (Members of the School Dentists' Society 20% less).

Other slides are in course of preparation.

### BIBLIOGRAPHY.

- Local Government Board Directory. Knight & Co., Tooley Street. 8/6.
- L.C.C. Medical Officers' (Education) Annual Reports. P. S. King & Son, Westminster. 2/6 net.
- Reprint of Seven Reports of British Dental Association as to "The Condition of the Teeth of School Children."

  1901. John Bale, Sons & Danielsson, Limited, 83-91
  Great Titchfield Street, Oxford Street, London, W. -/6
- Memorandum in regard to the "Condition of the Teeth of School Children." Containing the Dental evidence given at the Inter-Departmental Committee on Physical Deterioration. John Bale, Sons & Danielsson, Limited, 83-91 Great Titchfield Street, Oxford Street, London, W. -/6
- Annual Report of Board of Education. Annual Reports of the Chief Medical Officer to the Board of Education, 1910. Wyman & Co. 1/3
- Transactions of the British Dental Association
  - (a) Compulsory attention to the teeth of School Children. Cambridge, 1885.
  - (b) Compulsory attention to the teeth of School Children, and Army and Navy. 2nd Paper, London, 1886.
  - (c) Compulsory attention to the teeth of School Children, and Army and Navy. 3rd Paper—Procedure and Distribution. London, 1891.
  - John Bale, Sons and Danielsson, Limited, 83-91 Great Titchfield Street, Oxford Street, London, W.
- Annual Reports of the Local Government Board. 1907-1908, 3/8; 1908-9, 2/11; 1909-10, 2/11; 1910-11, 3/- Wyman & Co.

# Bale's School Dental Clinic

# Card Index System

For Use in Primary School Clinics
Recommended by the School Dentists' Society

# A COMPLETE OUTFIT CAN BE SUPPLIED PRICE £3:3:0 NET.

WHICH CONSISTS OF

### The S.D.C. Register

Demy, Strongly half bound, ruled same as Record Cards, 50 entries to a page, 15,000 entries in all.

### Record Cards

Size  $7_4^{8''} \times 5''$  in two distinct colours. Boys—Blue, Girls—Pink.

### Fumed Oak Cabinet

 $16'' \times 9\frac{1}{2}'' \times 7\frac{1}{4}''$ Holds about 700 Cards.

### Alphabetical Index

for Cabinet.

The following are a few of the Authorities by whom this system has been adopted: Bromley, Chatham, Chelmsford, Coventry, Dunfermline, Ealing, Ely (Glam), Exeter, Guildford, Hull, Portsmouth, Reading, Scarborough, Torquay, Windsor, Wishaw, Woking, &c., &c.

Samples of Cards and page of Register, together with prices for larger quantities can be obtained of

JOHN BALE, SONS & DANIELSSON, LTD.,

83-91 GREAT TITCHFIELD STREET, OXFORD STREET, W.

# ALSTON WORKS, BARNET, England.



The Dental Manufacturing Co.'s Factories, as recently enlarged.



# The Dental Manufacturing Co. Ltd

# SCHOOL DENTAL CLINIC EQUIPMENT IS EVERYWHERE GIVING MOST COMPLETE SATISFACTION.

IN these advertising pages our available space is too small to fully describe the many advantages of our equipment. We therefore can only describe here the leading requirements. The rapidly growing recognition of the importance of the subject and the increasing number



of requests we are receiving for details have made it necessary for us to issue a second, and amplified edition of **OUR PUBLICATION** on how best to equip a School Dental Clinic. In this compilation we have included a ruled form of estimate on which is printed the names of requisite appliances, medicaments, instruments, etc., and three sets of cash columns, to enable the dental officer to make alternative **ESTIMATES OF COST** according to funds. The appliances, etc., are profusely illustrated, and the pages in which the articles are described are referred to in the estimate form.

COPIES CAN BE HAD FREE, ON APPLICATION.

The D. M. Co.'s School Dental Clinic Equipment-Continued.

THE D. M. Co.'s Pump Chair in the illustration of the Reading School Clinic, is Manufactured at the D. M. Co.'s Barnet Factories from special castings, which insures all proportions being correct



A corner of the Reading School Dental Clinic, equipped by the Dental Manufacturing Co., Ltd.

throughout. It rotates on its axis carrying all its levers with it. The body can be tilted; the seat at its lowest is  $20\frac{3}{4}$  inches from the ground, and at its highest 30 inches. The back and the head-rest

### The D. M. Co.'s School Dental Clinic Equipment—Continued.

may be raised independently of each other. The arms are reversible, and the width of the seat between the arms is 154 inches at the widest. The foot-board may be detached entirely from the body of the chair, or raised or lowered as desired, bringing it to within 6 inches at its highest, or 14 inches at its lowest from the seat. The range provided in the back and foot-board accommodates the chair to children of the youngest or oldest school ages. We supply this chair in either white or black japan. The parts usually nickle-plated are supplied in that way or in oxidized copper, which latter we recommend in application to all metal fittings, as the effect is both artistic and pleasing, whilst labour of polishing is avoided. The fittings are of beechwood, stained and French polished. A wide piece of rubber is let into the front surface of the seat to prevent the child slipping forward. The Price is Sixteen Guineas, net.

THE important matter of a **Comprehensive Dental Cabinet** has received our most careful consideration. The efficient Cabinet, illustrated on the opposite page, will be found in every way suited for a School Clinic. The Price is Nine Guineas, net.

THE **Spittoon** is a white porcelain pedestal fountain spittoon, with copper oxidized or nickel-plated fittings, as preferred. It has a glass holder, saliva ejector and flush, all controlled by one tap.

The Spittoon is fixed to the floor, thus doing away with the rubber tube connections.

Price, complete with saliva ejector and tube, cold water only, £5 3s. 6d. net. It can also be supplied for hot and cold water.

Let us send you, post free, our publication on how best to equip a School Dental Clinic.

# The Dental Manufacturing Co. Ltd

ALSTON HOUSE, NEWMAN STREET, LONDON, W.

Branches | Manchester, Newcastle, Glasgow, Dublin, Moscow.

Telephones: Gerrard 9424 (3 lines). Telegrams: Fossiline-Ox, London

# THIS BOOKLET HAS BEEN PRODUCED BY

# W. Michael & Son

### PRINTERS AND PUBLISHERS

Standard Printing Works

WATFORD -

HERTS.

# AND IS SUBMITTED AS A SAMPLE OF WORK

### HALF-TONE AND LINE BLOCKS ENGRAVED AND PRINTED

Telephone: 23x Watford

Telegrams: Michael . Printers . Watford

# REFERRING TO THE PREVIOUS EDITION OF "OBJECTS AND AIMS"

SCHOOL DENTISTS' SOCIETY.

Messrs. Michael & Son.

Gentlemen.—At the last meeting of the Council of the School Dentists' Society I was instructed by the members to convey to your firm their appreciation of the way in which it had carried out the work in connection with the printing and publishing of the booklet descriptive of the objects and aims of the Society.

The opinion of the members of the Council was that the work was excellent.

Yours faithfully,

WILLIAM FISK,

Hon, Sec. School Dentists' Society.

April 9th, 1910.



# Best British Brushes

The

# School Standard: Cooth Brush:

PRICE - - 2/6 per dozen. 27 - per gross

The

### School Junior Cooth Brush

PRICE - - 23/- per gross

Can be retailed to children at 2d. each.

THESE patterns are designed specially for use in Schools, and were recommended by the School Dentists' Society, in December, 1908.

They are constructed on scientific principles and by Patent Machinery.

The bristles are of high quality and are pure—no other material being mixed with them.

The knots of bristles are securely fastened with anchors of phosphorbronze wire, which does not corrode.

A space is left rough on the back of each brush for writing the child's name.

MANUFACTURED BY

G. B. KENT & SONS, LTD.,

75 FARRINGDON ROAD, LONDON, E.C.

# School Dental Clinic Outfits,

OF ANY VALUE TO SUIT REQUIREMENTS.



School Dental Clinic Chair.



SUPPLIED BY

# Claudius Ash, Sons & Co., Ltd.,

5 to 12 Broad Street, Golden Square, LONDON, W.

Established 1820.

### School Dental Clinic Outfits—Continued.

During the last 14 years, that is since 1898, we have supplied many School Outfits as suggested by

# = = = The = = = School Dentists' Society

and we shall continue to make it our aim to provide for Schools in accordance with the recommendations of the Society, knowing as we do that they are the outcome of personal experience and knowledge on the part of its Members.

ILLUSTRATED LIST, POST FREE, ON APPLICATION

# School Dental Clinics:

Their Foundation and Management,

BY

### C. EDWARD WALLIS, M.R.C.S., L.R.C.P., L.D.S.,

Dental Surgeon and Lecturer on Dental Surgery, King's College Hospital; late Dental Surgeon, Victoria Hospital for Children, Chelsea; and L.C.C. Industrial Schools, Feltham.

Large 8vo Cloth, 66 Pages and Index, 12 Blank Pages for Memoranda, and 17 Illustrations.

PRICE NET 36

(1) (1)

# Claudius Ash, Sons & Co., Ltd.,

5 to 12 Broad Street, Golden Square, LONDON, W.

Established 1820.

# OUR TEETH:

HOW BUILT UP, HOW DESTROYED, HOW PRESERVED,

BY

### R. DENISON PEDLEY, F.R.C.S.ED., L.D.S.ENG.,

President of the School Dentists' Society; Consulting Dental Surgeon to the Evelina Hospital for Sick Children, Southwark; &c., &c.;

AND

### FRANK HARRISON, M.R.C.S.ENG., L.D.S.ED.,

Dental Surgeon, Sheffield Royal Hospital, and Lecturer on Dental Surgery and Pathology, Sheffield University.

RICHLY ILLUSTRATED FROM MICROSCOPE PHOTOGRAPHS.

PRICE NET 5 -

# AN INTERESTING BOOK FOR THE WAITING-ROOM.

All practitioners should strive to impress upon their patients the importance of the care of the teeth. The best method of doing this is to have suitable literature on the waiting-room table. Of late years considerable advance has been made in this direction, much to the interest of patients and to the benefit of Dentists.

Among the various Dental Books for popular reading a conspicuous place must be given to "Our Teeth," by Messrs. Pedley and Harrison. It is recommended to teachers by the Board of Education and other authorities. It should be read not only by Dental Practitioners, but also by parents, guardians, and the public in general, and no dental waiting-room should be without a copy of it.

### CLAUDIUS ASH, SONS & CO., LTD.,

5 TO 12 BROAD STREET, GOLDEN SQUARE, LONDON, W. ESTABLISHED 1820.

### SET OF 39

# LANTERN SLIDES

### (MR. FRANK HARRISON'S)

For use in Demonstrations and Lectures.

With this varied and beautiful set of Lantern Slides, which represent some of the best and most artistic work of the late Mr. Frank Harrison, a lecturer can keep his audience spellbound; they are

# EDUCATIVE, INTERESTING, ENTERTAINING,

and leave no doubt in the mind as to the value of good Teeth and the importance of keeping them in a sound and healthy condition.

Detailed list on application.

# LANTERN SLIDES

### ON THE CARE OF THE TEETH.

Set of 14,

specially arranged by

### MR. C. E. WALLIS,

to assist Dentists in giving popular lectures in poor districts. No technical words appear on the Slides, and they are, as far as possible, self-explanatory.

Full particulars on application.

### CLAUDIUS ASH, SONS & CO., LTD.,

5 TO 12 BROAD STREET, GOLDEN SQUARE, LONDON, W. ESTABLISHED 1820.

# The S.D.S. Dental Hygiene Charts

SEE REDUCED REPRODUCTIONS IN THIS BOOKLET.

Each Chart measures 54 × 38 ins. and is mounted on cloth and rollers, and varnished.

Price: 12/- each. The set of three, 30/-

TO BE OBTAINED OF THE PUBLISHERS:

MESSRS. W. & A. K. JOHNSTON, LTD.,

2 ST. ANDREW SQUARE, EDINBURGH,

7 PATERNOSTER SQUARE, LONDON, E.C.

OR OF ANY DENTAL DEPOT.

# 'Transactions of the School Dentists' Society.'

Published at 6d. each number.

MAY BE OBTAINED OF THE HON. SEC. OF THE SCHOOL DENTISTS' SOCIETY, STREET LODGE, WATFORD, ENG.

### INDEX.

Admiralty and Dental Surgery, 39

America (U.S.), Present condition of School Dentistry in, 81-83 Appointments held by Members,

Army Recruits, Dental require-

ments for, 29

Arrangements and Appointments for Dental Treatment made by Local Education Authorities, 36-39, 67

Australia, Present condition of School Dentistry in, 74-77

Austro-Hungary, Present condition of School Dentistry in, 83-85

B.D.A. and School Dentistry,

Belgium, Present condition of School Dentistry in, 85-87

Bibliography, 114

Board of Education—Chief Medical Officer's Report, 103-105 Boards of Guardians and School Dental Officers, 29-34, 63-64

Canada, Present condition of School Dentistry in, 78 Chart No. 1 reproduction, fac-

ing 109

Chart No. 2 reproduction, facing 110

Chart No. 3 reproduction, facing 112

Coloured Lantern Slides for Popular Hygiene Lectures, 113 Corresponding Members, 16

Cost of School Dental Clinic Equipment, 60-62

Council of S.D.S., 3

Day Industrial Schools, 58-59 Denmark, Present condition of School Dentistry in, 87-88 Dentists appointed by Local Education Authorities, 36-39 Dentists appointed to Day Industrial Schools, 58-59

Dentists appointed to Industrial Schools, 44-59

Dentists appointed to Reformatory Schools, 40-44

Dentists appointed to Short Term Industrial Schools, 57-58

Dental Diseases, the treatment

of, 106-107

Diet and Dental Diseases, 103-105

Early Stages of School Dentistry, 20

England and Wales, Present condition of School Dentistry in, 66-69

Formation of S.D.S., 22
France, Present condition of School Dentistry in, 89-91

Germany, Present condition of School Dentistry in, 91-94

Home Office and School Dentistry, 40-59 Honorary Members, 16 Hours in a "School-Week," 65

Industrial Schools Dental Appointment, 44-59

Inspection and re-inspection of Children's Teeth, 107

Ireland, Present condition of School Dentistry in, 72-74

Italy, Present condition of School Dentistry in, 94-95

Lantern Slides for Dental Hygiene Lectures, 113

L.G.B. Circular regarding appointment of Dental Officers, 63-64

London Poor-Law Appointments 30-31, 34-35

Members of S.D.S., 5-16 Metropolitan Asylums Board Appointments, 35, 67

National Insurance Act, 1911, 107 Naval Recruits, Dental requirements for, 28-29

New Zealand, Present condition of School Dentistry in, 79-81

Notes for Charts, 108-113

Number of Children of School Age maintained by Poor-Law Authorities, 34

Nurse in the School Dental Clinic, 65

Officers of S.D.S., 3 Oral Sepsis, 100-101

Papers read before the Society, 25-28

Past Members of Council, 4 Past Officers, 4

Poor-Law Appointments, 29-34,

Poor-Law District Schools Appointments, 34, 66

Present condition of School Dentistry (1912), 66-99

Prevention of Dental Disease, 102-107

Provincial Poor-Law Appointments, 31-33, 34, 66

Public School Deutal Appointments, 66

Reformatory Schools Dental Appointments, 40-44

Remuneration of School Dental Officers, 65

Resident Benevolent Institutions,

Rules of S. D.S., 17-19

Russia, Present condition of School Dentistry in, 95-96

School Dental Clinics, 30, 36-39,67 School Dentists' Society: Officers and Council, 3-

Past Officers and Members of Council, 4—Members and appointments held by them, 5-16—Honorary and Corresponding Members, 16—Rules 17-19-B.D.A. and School Dentistry, 20-21—Formation of the Society, 22—Work of the Society, 23-24-Papers read, 25-28-Charts prepared by the Society, 108-113-Lantern Slides, 113

"School Week" and "School

Year," 65 Scotland, Present condition of School Dentistry in, 69-72

S.D.S. Dental Hygiene Charts, 108-113

Senior School Dental Officers in Large Centres, 65

Short Term Industrial Schools, 57-58

Spain, Present condition School Dentistry in, 97

Statistics relating to Public Elementary Schools, 39

Superannuation of Poor-Law Dental Officers, 29-30, 68

Suitable Equipment for School Dental Clinics, 60-62

Sweden, Present condition of School Dentistry, 98-99

Tooth Brush, The use of, 106 Trade Announcements, 1 to XII Treatment of Dental Disease, 106-107

United States of America, Present condition of School Dentistry in, 81-83 Use of the Tooth Brush, 106

War Office and School Dentistry,

Weeks in a "School-Year," 65 Work of Nurse in the School Dental Clinic, 65 Work of the Society, 23-28

### Memoranda.

Memoranda.

### Memoranda.



